OLD!

THE ESSENTIAL GUIDE TO CLASSIC GAMES

retro GAMER

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Speedball 2: Brutal Deluxe

MIKE MONTGOMERY ON THE ORIGINS OF HIS SCI-FI SPORTS HIT

Also inside

GAME OVER | JIM BAGLEY | SSI
JETSTRIKE | CARLETON HANDLEY
ORIC-1 | THE HOUSE OF THE DEAD 2

Lemmings

Key creators celebrate DMA's insanely cute puzzle game

Top 25 sports games

Boulder Dash

WAS THE BBC MICRO VERSION WORTH THE WAIT?

ESCAPING FROM THIS ISSUE:

30 Years of Atari ST
WHY THE 16-BIT MICRO WAS A WORTHY AMIGA COMPETITOR

Your guide to Kung-Fu Master
DISCOVER WHY IREM'S SCROLLING FIGHTER IS STILL A BRILLIANT BEAT-'EM-UP

Deus Ex revisited
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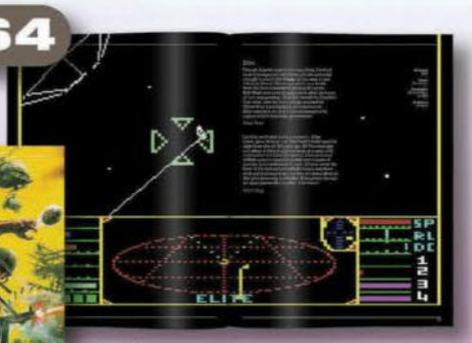

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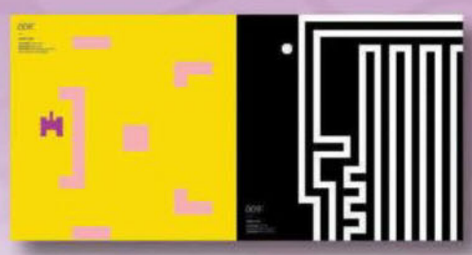

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THE RETROBATES

FAVOURITE SPORTS GAME

DARRAN JONES

California Games on the Sega Master System for me. An exceptionally impressive conversion with great visuals and lots of fun events.

Expertise:
Juggling a gorgeous wife, two beautiful girls and an award-winning magazine

Currently playing:
Conker: Live & Reloaded

Favourite game of all time:
Strider

NICK THORPE

It's got to be *Virtua Tennis 3*. The much-needed running shots were added, but there's none of the super shot silliness from *Virtua Tennis 4*.

Expertise:
Owning six Master Systems (I sold one)

Currently playing:
The Blockbusting Challenge

Favourite game of all time:
Sonic The Hedgehog

PAUL DRURY

The sense of wonder playing *International Soccer* on the C64 has never dimmed. Heading the ball from the halfway line and then volleying it past the lumbering keeper remains a highlight of my childhood.

Expertise:
Necklacing

Currently playing:
The Order:1886

Favourite game of all time:
Sheep In Space

JONATHAN WELLS

I'm going to go *Road Rash*, a bit of racing, a bit of violence, SOLD!

Expertise:
Takling dirty nappies and retro spreads

Currently playing:
Far Cry 4

Favourite game of all time:
Day Of The Tentacle

PAUL DAVIES

Super Tennis on the SNES, I was attracted by the crowd noise and other sound effects. The gameplay was of course astonishing too. And the Japan version said 'SHIT!'

Expertise:
Repeatedly banging my head against a brick wall

Currently playing:
Destiny

Favourite game of all time:
Ghouls 'N' Ghosts

DAVID CROOKES

No sports game will stand out as much as *Daley Thompson's Supertest*, not least because it broke my CPC-bundled joystick within two hours.

Expertise:
Amstrad, Lynx, adventures, Dizzy, and PlayStation (but is that retro? Debate!)

Currently playing:
Grim Fandango

Favourite game of all time:
Broken Sword

GRAEME MASON

Match Day 2, although I can only play it these days sped up on an emulator.

Expertise:
Adjusting the tape azimuth with a screwdriver

Currently playing:
Dead Space 3

Favourite game of all time:
Resident Evil 4

JASON KELK

I've never been a fan of sports games, but used to enjoy *Microprose Soccer* on the C64 when playing with with friends.

Expertise:
Being a homebrew hero

Currently playing:
Mission Monday (C64)

Favourite game of all time:
Io

LOADING...

Recently I've been the source of mockery at work, mainly because I've decided to start collecting two things: vinyl and Xbox games.

As some of you will no doubt remember, I like to collect things. I don't know why I do it, it just happens, and I always collect without restraint. When I first decided to delve back into Microsoft's first console, I had roughly 16 titles, good stuff like *OutRun 2*, *Project Zero*, *Jet Set Radio Future* and *Oddworld: Stranger's Wrath*. It's now something like two weeks later and I'm just short of 100 games. I've got a problem. Yet it's hard to *not* buy stuff, because Xbox games are so cheap. Only a fool would pass on *Project Gotham Racing* for 50p, or *Super Monkey Ball Deluxe* for £2.50, and I'm no fool.

I love collecting, I love the thrill of the hunt, I love the fact that I now own *The Sound Of McAlmont And Butler* on vinyl, but I also know that I can take things too far and become so focused on collecting that I forget to… you know, play the actual games. And playing the likes of *Dead Or Alive Ultimate*, *Gun*, *Fable* and *Baldur's Gate: Dark Alliance II* has taught me one thing – Xbox games are nowhere near as new (in terms of gameplay mechanics) as we like to think they are…

Enjoy the magazine!

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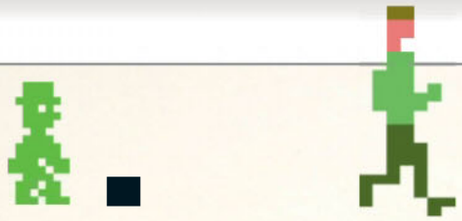

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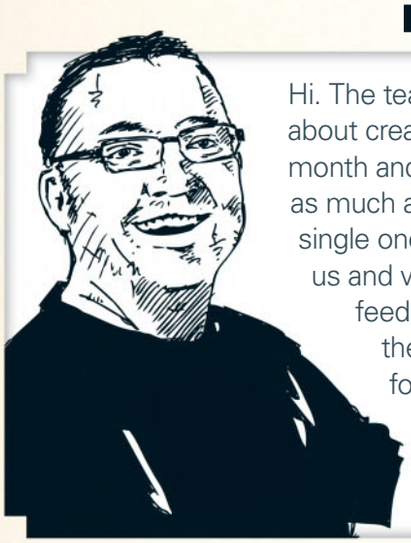
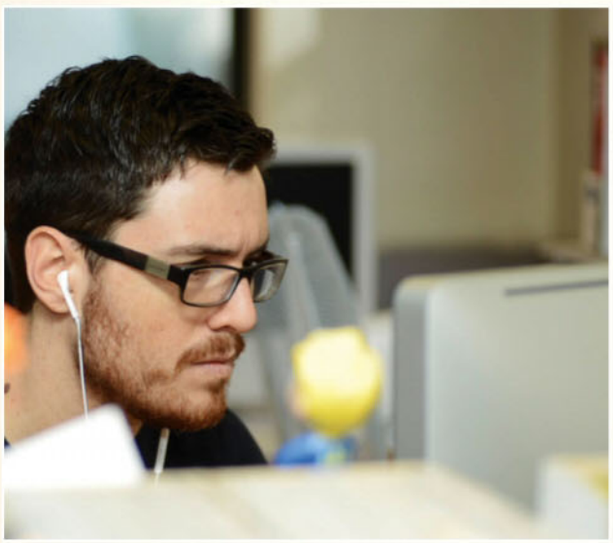


Hi. The team is incredibly passionate about creating **Retro Gamer** each month and we hope you enjoy reading it as much as we enjoy creating it. Every single one of our readers is important to us and we would love to receive your feedback so that we can improve the magazine and make it better for every one of you.

Darran Jones
Editor



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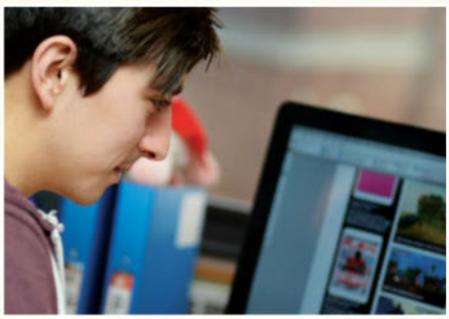

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THE BOY WONDER RETURNS

Thomas Kern explains why Wonder Boy is back with a brand new name

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A MOMENT WITH JIM BAGLEY
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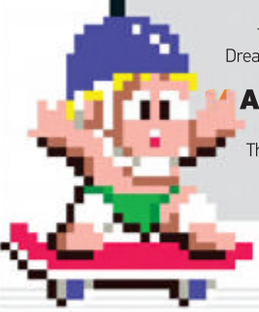


onder Boy is one of Sega's greatest forgotten franchises. Despite being extremely popular in the Eighties and Nineties, it has lain dormant since *Monster World IV* in 1994.

That's all about to change, though, as Game Atelier has teamed up with Ryuichi Nishizawa, *Wonder Boy*'s creator, to make a new game. It won't be called *Wonder Boy* as Sega owns the licence, but it is being created with the blessing of LAT Corp, the owners of the first games. We caught up with publisher FDG's Thomas Kern to find out how it happened.

Did you try and make a new *Wonder Boy* game? Why didn't it happen?
When Nishizawa-san joined to support the project, we asked about using the original game titles like *Wonder Boy* or *Monster World.* This wasn't possible because Sega owns the trademark. Everything else from the original series – the assets, graphics and sounds – belonged to Westone Bit Entertainment. When the company shut down last year, it transferred the rights to LAT Corp. We licensed the assets from there.

Apart from the original trademark, everything else makes it a true successor to the *Wonder Boy* series. We are cooperating with the creator and mastermind of the original series and we have access to all assets including the music of Sakamoto-san.

How important is it having Ryuichi Nishizawa on board?
It is very important because he inspires us. We're big fans of the *Wonder Boy In Monster World* series and being able to work with the original creator cranks up the whole teams commitment to the maximum. We have a very high quality standard on our own but we also want to honour the original Westone Bit Entertainment team with our new game, *Monster Boy.*

What involvement does he have?
Nishizawa-san is a very sharp mentor and advisor when it comes to the game design and he's giving us loads of feedback while we create the game world, music and other assets.

You can consider him as a team member, taking the seat next to the studio director and producer. His opinion carries a lot of weight!

***Monster Boy* looks incredibly similar to *Dragon's Trap,* which is arguably**

» Ryuichi Nishizawa, shown here, giving his full support to a new *Wonder Boy* game.

the best game in the series. Is this intentional at all?
First of all I'm glad to hear you consider *Dragon's Trap* as the best game in the series. We love all *Monster World* games but we were blown away when we first played [*Dragon's Trap*] on the Master System. The experience to explore new areas in a connected world by transforming to other creatures was absolutely fantastic. The characters, the music and the world design was unmatched for that time.

Monster Boy takes inspiration from all the *Monster World* games, but we loved the transformations feature so much that we had to give it a central role in our game. We're introducing some new transformations and we can't wait to see players making full use of them to discover all the secrets in the game.

What creatures can *Monster Boy* transform into and how will they affect gameplay?
I'm sorry, but at this point we can't reveal the various transformation features. Okay, maybe one: imagine transforming into a frog character and using his tongue to do various fun stuff.

Will *Monster Boy* differ from the other *Wonder Boy* games if so, how exactly?
First of all, this will be the first game in the series to have high-resolution 2D graphics. It's not a pixel game. While I understand many fans find pixel graphics charming (we love pixel graphics too) we want to make the next step forward and hopefully get old fans of the series as well as new players to play and enjoy the game. We put a good deal of effort into the design of the game world, while maintaining the colourful fantasy experience and fun characters of the series.

» The game is still a work in progress, but it's easy to see *Monster Boy* is the next-generation of *Wonder Boy*.

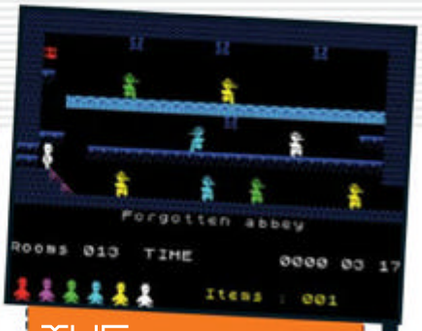
» *Monster Boy* started off as *Flying Hamster II* before the team decided to make a successor to *Wonder boy*.

We will also introduce some new mechanics to improve the combat flow while fighting the various enemies. We will keep the magical doors, appearing coins and hidden chests that made the original world so fun to explore. We will also keep the concept of a connected and believable world. To reach new areas you will have to use transformation and upgrade your equipment. It's basically a combination of *The Dragon's Trap* and *Wonder Boy In Monster World*.

Can you tell us anything about *Monster Boy*'s plot?
There is a wizard and he's going to be drunk – and he's doing funny things! Try to get him without turning into… Oh wait. No more reveals for now.

Why do you think that the *Wonder Boy* series remains so popular with gamers?
There are so many complicated games on the market that require you to do millions of things while navigating through numerous menus. We believe it will be refreshing to go back to the distilled formula of instant fun, fast and responsive gameplay, quick progress and enjoyable timing. We want to rekindle the generation of games when you could recognize the title by whistling three notes of the main melody. ★

»We can almost hear the music from *Wonder Boy III: The Dragon's Trap* playing in the background.



THE GREATEST GAMES EVER

» Retro Gamer needs your help to find gaming's masterpieces

■ It's been a decade since the magazine first launched and readers may remember a poll that charted the best 100 games of all time. We felt that enough time has passed to look back at the last decade of gaming and discover if opinions have changed at all over the past ten years.

Do you still feel *Elite* is the best game you've ever played? Are you a massive fan of *R-Type* and *Double Dragon* or do you feel like recent classics such as *The Last Of Us* and *Grand Theft Auto V* should be celebrated? Perhaps *The Sims* is the pinnacle of your gaming career, or maybe it all went downhill after you discovered *The Secret Of Monkey Island* and *Sensible World Of Soccer*? Whatever you feel the best games are we want your voice to be heard, this is *your* magazine after all.

To join in simply send an email to **retrogamer@imagine-publishing.co.uk** titled Greatest Games Ever. Send us your top ten personal choices and we'll do the rest. And if you want to tell us why these games made your list then let us know, we'd love to hear from you.

DISCUSS

What's your best retro bargain?

Forum
www.retrogamer.net/forum

■ Getting a CIB C64 and *Ultima 2* for $20. That doesn't seem much of a bargain on the outside, but when I resold it for $250, then it does!
Mayhem

■ *Metroid Zero Mission* – GBA mint and boxed – a quid at my local car boot.
gman72

■ Back when Gamestation were letting go of their retro stock, I got the likes of *Street Fighter Alpha 3* on Dreamcast for 1p and *Zelda Collectors Edition* on GameCube for 99p. At a car boot I was once lucky enough to get a *Zelda* Game & Watch for just 50p.
GigaPepsiMan

■ *Castlevania: Symphony Of The Night* limited edition for £9.99 in GAME in early 1998. Didn't have a clue about the game at the time, so I bought it purely because it seemed like a bargain.
Morkin

■ I think the only bargain I've ever picked up is *Kirby Air Ride* for 2.99 from Game.
felgekarp

Twitter
Twitter.com/@RetroGamer_mag

■ $5 loose *Cowboy Kid* a few years ago when the game was going for a shade under $100 for a loose cart.
@Bloodreign75

■ £1 for a Mega CD MK. I at a car boot sale.
@Spoonatron

■ Years ago, snagged a Neo Geo AES back when the only place to get second hand ones were in classifieds, less than £100!
@Matt_Lambourne

■ I picked up *Alien Trilogy* (for PS1) for 20p in Cornwall.
@jamielepiorz

■ £7.50 for an unboxed *Starwing* competition cart, £39.99 for a new sealed *Tetris* at launch.
@billysastard1

■ *Megaman: The Wily Wars* for £35. *Ultima: Savage Empire* for IBM XT for 2,50. ;) Amiga 600 for £4 is amazing!
@blast68k

■ Found *Alien Soldier* for the Mega Drive at a car boot sale for 50p!
@DrenOrter

■ PC Engine boxed with two games. £1 at a car boot sale.
@William_Stott

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■ *Panzer Dragoon Saga* for 50p.
Steve Short

■ *Zelda: A Link To The Past* on GBA for 99p and *Chrono Trigger* on DS for £5.
Paul Richards

■ Paid £80 for a "ninja arcade game" on Gumtree. It turned out to be an *Shinobi* cab.
Simon McGuinness

■ A Sega Saturn and 17 games for $50.
Nathan Gargus

■ Got a six-switcher Atari 2600 and 42 games – including the most popular ones in boxes with manuals for $0 – I paid the finder a pack of his favourite beer.
Nick Thiele

■ Amstrad 6128 + colour monitor = free
Mike King

■ *Total Eclipse 1* & *2 Special Edition* on C64 for the total of £1.00 at a convention. *Total Eclipse 2* is one of the rarest games on the C64 and it is only available in this boxed edition through The Home Computer Club mail order.
Mark Hogg

What We Think

■ Everyone loves a good bargain and I too have managed to get some gems over the years. They're certainly harder to come by nowadays because everyone thinks anything retro is of value, but they do still exist. My personal bests have included picking up *Panzer Dragoon Saga* for £3 and paying the same for *Streets Of Rage 3*.

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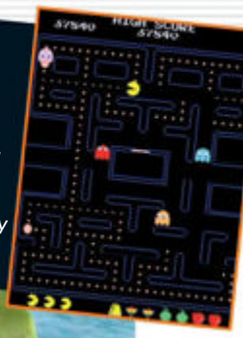
» PC] *Toejam & Earl: Back In The Groove* will be instantly familiar to anyone who played the Mega Drive original.

PAC-ATTACK

In the first week of May at Play Blackpool, *Pac-Man* maestro Jon Stoodley will be attempting a perfect play of Namco's game. Only six people have scored 3,333,360 on the classic arcade game and Jon intends to join them whilst raising money for the charity Bright Red. Pledge your support at www.justgiving.com/Jon-Stoodley/



TOEJAM & EARL HIT KICKSTARTER

We speak to creator, Greg Johnson, on getting back into the groove

Normally we don't like covering Kickstarter games until they finish. However, *Toejam & Earl 4* has had such a promising start we just couldn't wait. It's already halfway to its $400,000 goal, and that's why we're throwing caution to the wind. Greg Johnson, creator of the franchise is also feeling optimistic…

How does it feel working on a new *Toejam & Earl* game after all this time?
It feels great. Fans have been asking for a new *Toejam & Earl* game for so long, and with the advent of crowd source funding it seemed like I finally had a path to make that happen. Since then, I've seen an outpouring of enthusiasm from the 16,000 fans on the *Toejam & Earl* Facebook page that I started. I've been communicating directly with so many of them, and I have been kind of blown away by the enthusiasm that I have seen so far.

What made you decide to revisit the franchise?
For some reason there seems to be a lot of nostalgia going around these days. I think it has to do with the age people are now who played this generation of Genesis and Mega Drive games as kids. Maybe it also has to do with the ease with which people share their memories and nostalgia now via social media. For whatever reason, it has meant an increase of fans asking me for a new game.

Can we expect new characters in the game?
Maybe you mean player characters, or maybe you mean NPC characters. In any event, the answer is 'yes' and 'yes'. We're going to let players play with up to four players in both online and couch-co-op multiplayer, and they will be able to play as Lewanda and Peabo and a couple other Funkotronians that we have tied to stretch goals. In terms of Earthlings, there are new helpful Earthlings and not-so-helpful ones planned. But remember, this is *Toejam & Earl* so don't expect it all to make sense.

Will it be 2D or 3D?
Actually, the answer is somewhere in the middle. We'll have 2D sprites and a fixed (for the most part) isometric camera, so it will feel a lot like [*Toejam & Earl*]. That said, we will be taking advantage of the fact that it's all 3D underneath to do lots of playful things. We'll be able to zoom the camera in now to see close-ups of characters, or zoom way out during level transitions. It looks really cool to see multiple stacked levels at once.

Can you tell us about any of the gameplay mechanics that will be in the game?
There are way too many features to tell you about here, but I can mention a couple… Players will now be able to do a number of things to cooperate more effectively with their friends. They can shout and lure Earthlings away, they can ride on the other friend's back and shoot tomatoes, or toss their friend over gaps, and there will be a new set of presents that expressly do things like give life to your friend, or swap places with them, or protect them with a bubble while you meditate. I have a lot of goals for this game, but one of them is to make it an even better co-op game than it was. There simply aren't good non-shooter co-op games out there.

What will you do if your proposed Kickstarter campaign were to fail?
I'm not sure. I suppose if we can't reach our minimum bar it will mean that not enough people want a new *Toejam & Earl* game, so I'll probably head in another direction. Of course at the moment I'm excited and optimistic, and thoroughly enjoying being back in this Universe… but I'm ready for whatever comes.

» [PC] Cooperative gameplay in *Toejam 4* is inevitable, but will now cater for up to four players.

» [PC] The worlds are already looking impressive and will be packed with goodies to unlock.

Here's my bio... Paul Davies
In 1992 I started out on *Mean Machines Sega* and *Nintendo Magazine System*. In 1995 I became editor of *C&VG*. I led the *C&VG* website from 1998 until Christmas 2000, then I left journalism to be concept design manager at Criterion Games. I returned to journalism in 2002 and from 2005 I've been running my own company, Unlikely Hero.

Dynasties

Though there's a casual attitude to games in 2014, we still have attractions that keep people glued to the controller: *Call Of Duty, World Of Warcraft, Counter Strike, GTA* and *FIFA,* to name a few. These are great times to be playing games, though the excitement is no different to bygone eras.

We all know the powerhouses which are responsible for today's big experiences: Rockstar, EA, Activision, Ubisoft and Riot Games are just but a few of such giants. It's hard to imagine these shining stars ever dwindling; they are runaway trains that cannot be stopped, even if some of us roll our eyes at the annual instalments.

But these dominating powers that be have been a constant throughout my years as a gaming-obsessed but otherwise regular guy. Sir Clive Sinclair cast a spell on the UK with his ingenious and affordable home computers that were more astonishing than Game Boy or PS4 at the time. After a wobble with the prestige (boring/expensive/no games) QL and the awkward but endearing C5, the Sinclair reign was as good as over, but by this time there was an army of Commodore fans entranced by the C64 and Amiga. The latter, in the eyes of the truest believers, were clearly the way forward.

Change is inevitable, which in a way makes any current status-quo more exciting because it is only temporary. I could never have believed this during those intoxicating days of Sega versus Nintendo, which lasted for over a decade. This was *my* era, I suppose, when games like *Shinobi* and *Super Mario* lured me into a world that would later on deliver *NiGHTS* and *Mario 64* among other 'what will they think of next?' moments. Even that interloper, Sony ,didn't seem capable of rocking these ships.

Yet here we are after 20 years of PlayStation and over a decade of Xbox. Sega is out of the hardware race, and its roster is unrecognisable apart from the occasional Sonic release. Nintendo is a friendly also-runner where the company execs used to talk much more aggressively about their power and being number one. If you remember the fighting talk from Yamauchi, Lincoln and Main you'll know what I mean by that. Basically, if you're a kid getting into games in 2014, your view of who's the biggest and best is worlds apart from a point in time that still feels extremely recent to you and me.

PC gamers too have seen dynasties come and go. LucasArts appeared infallible for so many years, with series like *Monkey Island*, *Day Of The Tentacle* and *X-Wing*. When id Software entered the fray it was with such technical and creative ferocity that the entire world froze in awe. Now first-person shooters are ten-a-penny and it's the Massively Multiplayer scene that's on fire.

When looking back it's worth investigating just who it was piloting these mighty Gundams. How much of the success was a time-and-place thing, an individual talent thing, what seemed like missions from God and combinations of all three. I have *Final Fantasy VII* placed firmly in the 'mission from God' category.

Companies don't bet the farm or jump the gun as much as they used to, which is a shame because that kind of approach is what gave us the Dreamcast. The changes are coming though, and the biggest names just around the corner will come from somewhere equally unexpected. ✱

> **"Sega is out of the hardware race and its roster is unrecognisable"**

What do you think?

Do you agree with Paul's thoughts? Contact us at:

RetroGamerUK @RetroGamer_Mag retrogamer@imagine-publishing.co.uk www.retrogamer.net/forum

PICK OF THE MONTH

PowerBase Mini FM

The Power Base Converter is one of the best Mega Drive accessories, allowing backwards compatibility with Master System games, but its awkward shape makes it a pain to use on some models of the console. Not only does this new version from db Electronics solve that problem by being smaller, it adds a chip to enable an enhanced FM sound in Master System cartridges that support it, such as *R-Type*, *After Burner* and *Shinobi*. This capability was previously only available to owners of Japanese Mark III/Master System hardware, so these enhancements will be new to most fans of Sega's 8-bit system.

Price: $64.99
From: www.stoneagegamer.com

Lemmings Plush

If this issue's cover appealed to you, then you might just be the sort of person who would love this *Lemmings* plush. The cuddly critter is 22cm tall and plays sound effects including the iconic "oh no!" – but its best feature is clearly the fact that unlike its in-game counterparts, it won't stroll obliviously into fatal traps… or explode.

Price: £17.99
From: www.gamerabilia.co.uk

> "It's not cheap, but this 14 inch figurine is undobtebly a must for die-hard fans of Sega's graffitti-based cult classic"

Beat Figurine

This cool figurine of *Jet Set Radio*'s Beat shows him in his classic design from the original Dreamcast game, and includes LEDs in the sparks of his skates which flicker and flash to show the intensity of his grind. It's not cheap, but this 14 inch figurine is undoubtedly a must for die-hard fans of Sega's graffiti-based cult classic.

Price: $229.99
From: www.first4figures.com

NES Backpack

When you are carrying retro bits to a friend's house for a multiplayer session, you need an appropriate bag to do all that carrying. This backpack styled after a NES controller isn't just appropriate, it's cool – especially as the buttons have an embossed 3D effect to really stand out. Now, if only you had to enter the Konami code to open it…

Price: £34.99
From: www.funstock.co.uk

Super Red Green Blue

When a young man has a mid-life crisis on his 30th birthday, he uses memories of past relationships and his favourite videogames to take stock of his life and hopefully create a better future for himself. While it's quite course in places, Super Red Green Blue will resonate deeply with anyone that has a love of videogames.

Price: £7.99 (£6.99 Kindle)
From: www.amazon.co.uk

DOOM GAMES

"*Doom* is one of my all-time favourite games, and I have pretty much every version for consoles. I met John Romero last year and got my Jaguar copy signed!"

PAID: £5-10 each

NEO GEO POCKET

"This is the original monochrome NGP and it's quite difficult to play due to the screen, but the built-in horoscopes are great!"

PAID: £20

IMPORT SEGA SATURN

"I love the Saturn and this Japanese one allows me to play some great games we never got in the UK, like *Gale Racer*."

PAID: £45

3DO

"This is a great console and has some really good games on it. *Samurai Shodown* is a really good port, and it loads faster than the Neo Geo CD version!"

PAID: £50

GAME BOY ADVANCE SP 101

"This is the fairly uncommon backlit GBA SP and it makes games look so much better!"

PAID: £35

JEWEL IN THE CROWN

THAT PIECE YOU CAN'T BE WITHOUT

SEGA MULTIMEGA

"I love the small form factor of this Megadrive/Mega CD combo and I still use it quite a bit. I bought this from Leigh Hills who was previously featured in collector's corner!"

PAID: £90

Collectors corner

Readers take us through the retro keyhole

BIO

NAME: Tom Charnock

ESTIMATED VALUE: Maybe £10,000 if I'm being generous

MOST EVER SPENT: £70 on *Defender* for the Atari Jaguar via an online auction

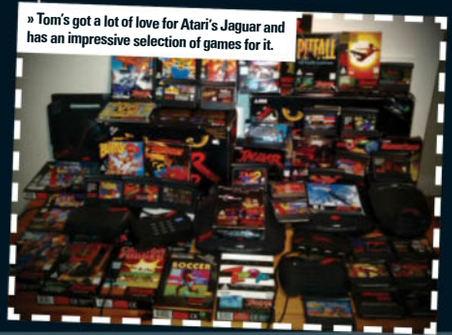
FAVOURITE CONSOLE: Dreamcast

Unlike some of our featured collectors, Tom's only been in the game for a short time. "I've only been collecting for around two years now," he tells us, but that doesn't make his collection any less impressive.

"Most of the consoles I now have in my collection I owned when they were contemporary, but had been subsequently sold to fund the next console purchase." We've all been there of course, but something eventually changed in Tom and while he now collects for several systems there are two he's particularly drawn to: Sega's Dreamcast and Atari's Jaguar.

"The largest component of my collection is my Dreamcast stuff," he reveals. "I had a system between 1999 and 2001 and sold it when the PS2 came out. Then in 2005 I bought another one from a second hand shop and have been buying up all the games I used to have, and all the ones I didn't." You might recall that Darran was once aiming for a complete Pal collection, stopping roughly 40 games short of a complete collection. Tom, on the other hand, is doing much better. "I'm about ten games off a full collection," he tell us, "but these last few are the really expensive and rare games such as *MoHo* and *Taxi 2*. As well as the games, peripherals and systems, I have a lot of merchandise – jackets, bags, even a tissue box holder!"

Tom has an equally impressive Jaguar collection, and we were keen to know what led him to collecting for it. "In terms of PAL games, I do have a soft spot for the 'also ran' systems from various generations," he admits. "I also have a soft spot for the Atari Jaguar." But why collect in the first place? We wonder. "I suppose I collect for the same reasons a lot of people do – mainly to re-live my youth and also I'm in a position now where I can afford to buy the games and systems I couldn't as a kid."



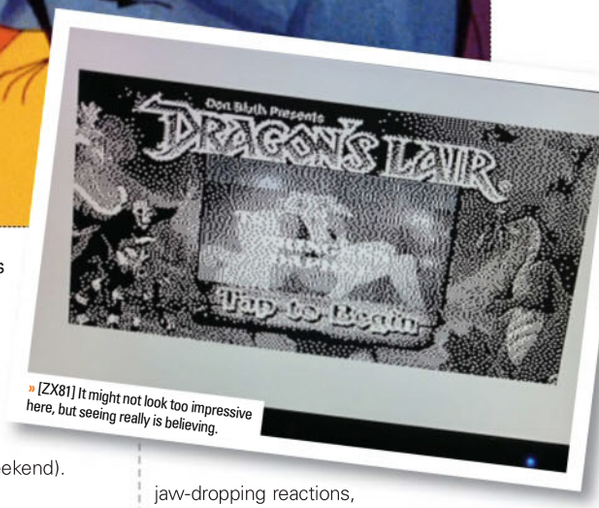
» Tom's got a lot of love for Atari's Jaguar and has an impressive selection of games for it.

a moment with...

Jim Bagley

The coder tells us about his Dragon's Lair port he's creating for the ZX81

» [Arcade] Here's the original *Dragon's Lair*, just in case you're never seen it before.



» [ZX81] It might not look too impressive here, but seeing really is believing.

What on earth made you think converting *Dragon's Lair* to the ZX81 was a good idea?
Haha, good question. Back in the day, the first computer I ever got was a ZX81. I wrote lots of games for it in BASIC, before moving onto a VIC-20, then a Speccy where I started writing machine code. In 2013 I wrote my first arcade game *PacManicMinerMan*, [which was] something I wanted to do back in the day. Once I completed it, I wanted to do something else I wanted to do back in the day – make a machine code game for the ZX81. I had always been wowed by the games that were so much faster than mine on the ZX81 because of machine code, so after *PMMM*, I decided I should do one for the ZX81. After researching how the RAM was laid out and how the screen display works, I wrote *Jim Bagley's ZX81 Racing*.

How did that go?
The problem was there was an issue with my ZXpand, which wouldn't show high-res. A conversation with Charlie Robson, the guy who makes them, [revealed that] there was a fault with one of the diodes. We were talking about coding, and I was thinking that I should do another ZX81 game, and an idea popped into my head, and I asked if the display would still be active when loading a file from SD card. Charlie said yes, so I looked for the AVI [of *Dragon's Lair*] that I converted from the DVD a few years back when I wrote it for a Parallax micro controller board that I had. I then converted it to 2-colour using dither to give the illusion of shades of grey. Whilst it was converting, I started working on the code.

It sounds tricky...
Charlie sent over a copy of the ZXpand ROM source, so I could see how it loads in a file from SD. I originally had it at full screen, but playing the stream, it was far too slow, so I decided to half the X and Y resolutions to 128x96, this then fixed the speed issue. Andy Spencer a good friend of mine who runs Retro Computer Museum likes seeing my games, so I asked him if he'd like to see something I was working on. Needless to say he loved it, and it premiered at his show in Snibston the next day (Valentines Weekend).

You're not using a standard machine right?
Yes and no, it is a standard ZX81 with an add on board, ZXpand (available at www.sellmyretro.com), which was created by my good friend, Charlie Robson.

What were reactions like when it made its debut at RCM?
It was only two days old from scratch when it was shown at Snibston, which thankfully had amazing jaw-dropping reactions, some suggesting witchcraft and other crazy magic haha.

» [ZX81] Jim's games were always technically outstanding, so it's no surprise he's managed this on the ZX81.

How much of the original game are you hoping to include?
I'm hoping to make it fully playable by Play Blackpool in May.

Before we go, can you tell us how the Spectrum *Double Dragon* project is coming along?
I still want to do it, but with it not being a project of something that I have personally wanted to do, like an arcade game, or a ZX81 game in assembly, it's not as high on my to do list. I don't often get much free time, with work and my family, so I put the emphasis on it being *my* time and put priority on what interests me more. It will get done, I'm just not sure when, especially with the ZX Spectrum Vega being around the corner. I want to make a game for that too!

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BACK TO THE NINETIES

» [PlayStation] Despite the constant Uranus references, *Blasto* was a rollicking good shooter/ platformer.

THE LATEST NEWS FROM MARCH 1998

MARCH 1998 – Sega casts a dream, Parasite Eve gets under your skin, Conflict lags behind, Road Rash crashes, while Blasto gets to battle around Uranus. Richard Burton ensures that wet wipes are available at all times…

After a rather unimpressive 1997, Sega announced its intention to concentrate efforts on the PC market by setting up a Sega PC division. Initially, it would release games in tandem with its Saturn console, but over time, it would lead with PC releases first and then eventually release PC-only games.

How this would work with the news that Sega were also planning a new console, the Dreamcast, for release in Japan by the end of the year was pretty unclear. With Microsoft becoming involved with Sega for the eventual development of a custom Dreamcast version of Windows CE, potentially that, at the time, meant simpler conversions of existing PC games to the Dreamcast.

Nintendo had hardware news of its own with the revelation that it would be releasing a colour version of its Game Boy handheld system. Ingeniously entitled, Game Boy Color, the new system would have the same resolution screen as its older, greyer, brother but it would generously allow backwards compatibility of games.

Squaresoft received its first Mature rating from the Entertainment Software Rating Board (ESRB) for its survival horror, action role-playing adventure, *Parasite Eve*, released this month on the PlayStation. It was the first game in what would become an ongoing series, it was also a detached sequel to the original *Parasite Eve* book which itself went on to become a manga series.

The game is set six days after Christmas Eve in six realistically styled settings, a pleasant surprise from the usual ten-a-penny futuristic guff currently saturating the market. While the RPG elements were lightweight with few characters to interact with, and minimal depth, the storyline was sufficiently complex to keep you hooked. Conversely, the combat and weaponry side of things was a darned sight fruitier and a lot more satisfying.

The story follows Aya, who was strangely immune to the effects of a mutated monster/opera singer, Eve, who had made its audience at a opera house spontaneously combust. Your task was to destroy the mutated Eve, which was only half the battle, as she also wanted to birth the rather dangerous 'Ultimate Being'.

Complete all the game's levels and you get to Chrysler Building section, which is essentially an endurance test with minimal save points, and multiple bosses to beat. Get to the final floor and you must tackle the true final boss.

Parasite Eve may be faulted for being a shade on the short side, but it was a magnificent piece of gaming. Such a pity, then, that it never managed to get a European release…

Out on PC this month was *Conflict: Freespace – The Great War* by Volition,

» [PlayStation] As disappointments come, *Road Rash 3D* ranks up there with *Out Run* on the Amstrad CPC.

» [PC] *Conflict: Freespace – The Great War* had many things going for it. Its online mode wasn't one of them.

» [PlayStation] *Parasite Eve* is a beautiful piece of gaming. It's just a shame that us European gamers will have to get a copy in on import.

THIS MONTH IN…

COMPUTER & VIDEOGAMES

The resurgence in the Game Boy and with the new colour version due out soon saw more new Game Boy titles winging their way to Europe. Top of the list were *Pocket Bomberman*, *Ganbare Goemon*, *Wario Land 2* and the much long awaited *Pokémon*.

GAME PRO

Game Pro featured an interview with the creative mind behind many a Nintendo franchise – Shigeru Miyamoto. He was asked what he thought of the current craze for Game Boy's *Pokémon* and he said, "it's causing us a headache. It keeps the N64 from selling. *Pokémon* is selling too much."

OFFICIAL SEGA SATURN MAGAZINE

OSSM highlighted the ongoing problems for Sega and the Saturn. In the USA a third of Sega's staff had been laid off and third party software support had dried up. The towel had been thrown in for the Saturn and was replaced with a piece of Dreamcast flannel…

the developer who would go onto the *Red Faction* and *Saints Row* franchises. In this online space combat simulator you, the Terrans, must team up with your former enemy, the Vasudans, to halt the seemingly unstoppable threat of a new species of invaders, the Shivans, who want to exterminate both groups.

Although there's not a huge amount of originality to *Conflict Freespace – The Great War,* and with a distinct whiff of *Wing Commander* regarding playability, *Conflict Freespace – The Great War* does manage to knit together a credible storyline with a weighted balance of full blown combat missions and strategy.

Great graphics (particularly the explosions), combined with a fast-paced set of missions made *Conflict* a highly rated game on PC. However, one large dark cloud loomed over *Conflict* and that was the woeful lag that occurred during the online multiplayer. *Conflict* boasted that it could cope with up to 16 players at a time, yet a standard two player foray often resulted in infuriating lag, with the added frustration of inaccurate reporting of statistical information such as ship hits.

Blasto brought us all down to earth again. This simplistic, yet fun, third-person shooter with platforming aplenty would see Captain Blasto, a dim-witted yet powerful superhero, attempt to save the Space Babes (who are being held on Uranus) from the evil alien overlord Bosc. Much guffawing and tittering followed as you embark on your mission to save the scantily clad buxom females frequently scattered around the planet.

Blasto was good fun, varied and enjoyable. The constant use of Uranus, even for the most ardent double entendre loving gamers, began to rub you up the wrong way after a while, although this was tempered by the terrific voice acting skills of comedian Phil Hartman, who was tragically murdered just two months after the game was released.

Fans of motorbikes and being punched in the face would rejoice with news of the PlayStation release of *Road Rash 3D* by Electronic Arts. At least, they would until they played it. Whether you wanted to race, fight or a combination of the two, *Road Rash 3D*, with its spangly new graphics, was a severe let down. Glitchy controls and even glitchier graphics left fans of the previous incarnations feeling a sense of sadness at a missed opportunity.

In the sweaty murkiness of the arcade could be found two new coin-ops released this month. First up was *Sega Rally 2 – Sega Rally Championship*, the sequel to the 1994 arcade hit. It was more of the same winning formula with beautifully designed courses, new improved environmental settings, and an abundance of cars to choose from.

Sega also released *Fighting Vipers 2*, the 3D fighting game which sees your armour smashing moves cranked up a notch. The characters had also been beefed up with new moves, abilities and attack patterns. All in all, it was stylish and competent game. ✱

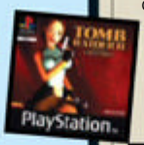
CHARTS

MARCH 1998

NINTENDO 64

1. FIFA 98: The Road To The World Cup (Electronic Arts)
2. Diddy Kong Racing (Nintendo)
3. GoldenEye 007 (Nintendo)
4. Super Mario 64 (Nintendo)
5. Lylat Wars (Nintendo)

PLAYSTATION

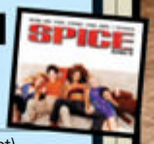


1. Tomb Raider 2 (Eidos)
2. FIFA 98: The Road To The World Cup (Electronic Arts)
3. Toca Touring Cars (Codemasters)
4. Crash Bandicoot 2 (Sony)
5. Cool Boarders 2 (Sony)

SEGA SATURN

1. Sonic R (Sega)
2. Sega Worldwide Soccer 98 (Sega)
3. Resident Evil (Capcom)
4. Toca Touring Car (Codemasters)
5. Sonic Jam (Sega)

MUSIC



1. Mama/Who Do You Think You Are? (Spice Girls)
2. Don't Speak (No Doubt)
3. Encore Une Fois (Sash!)
4. Hush (Kula Shaker)
5. Alone (Bee Gees)

MARCH WORLD NEWS

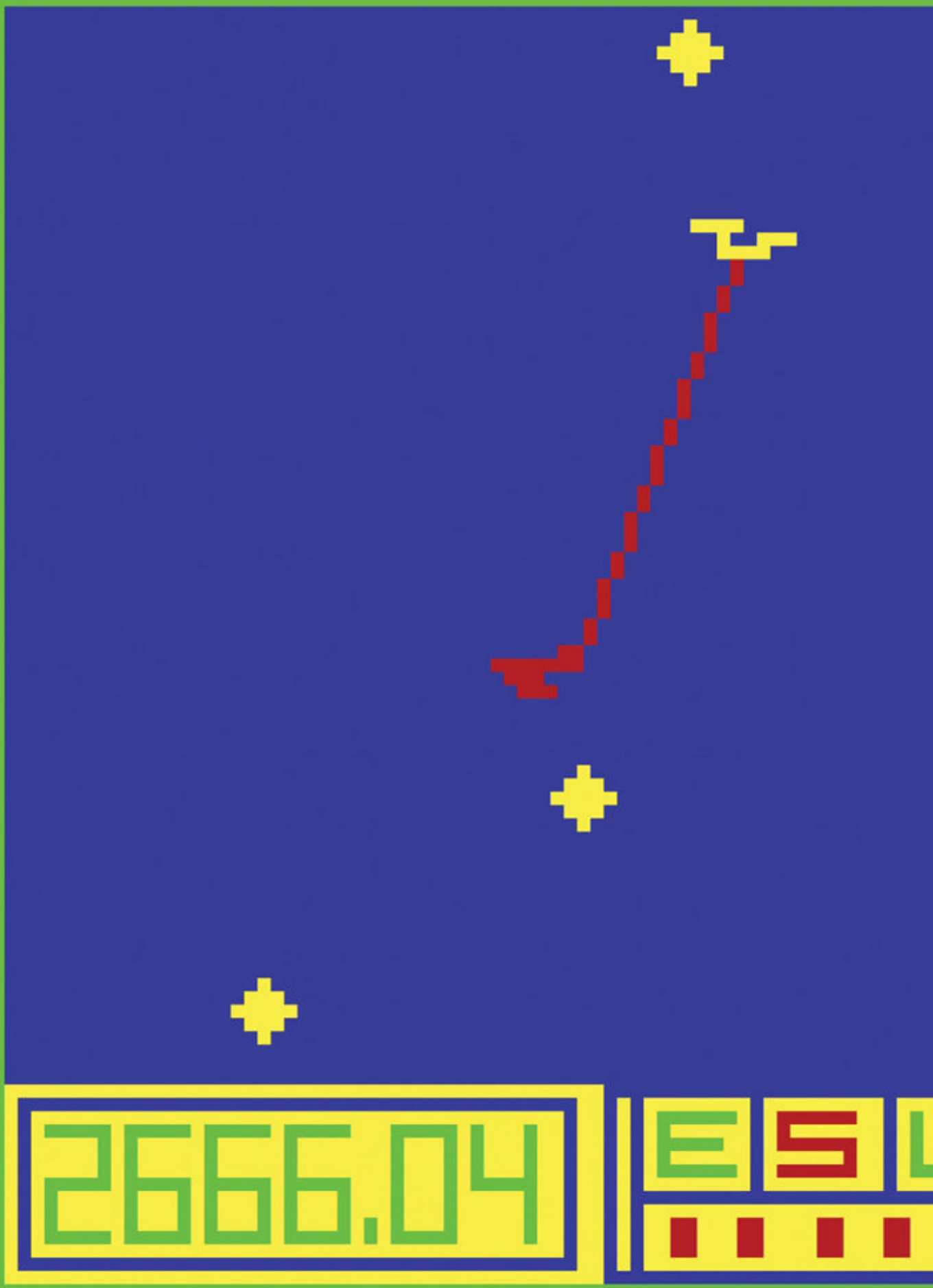
There were some big album releases in the world of music this month with the most notable new additions to your vinyl/CD collection being *Ray Of Light* (Madonna), *Van Halen III* (Van Halen), *Crystal Planet* (Joe Satriani), *Virtual XI* (Iron Maiden), *Snake Bite Love* (Motorhead) and *Guilty 'Til Proven Innocent!* (The Specials).

10 March saw Lloyd Bridges, the American film and TV actor, die at the age of 85. The father of actors Beau and Jeff Bridges, Lloyd had a distinguished career although he is frequently remembered for playing the twitchy, chain-smoking air traffic controller Steve McCroskey in the comedy film *Airplane!*

13 March saw the passing of Judge Dread, the English ska and reggae singer. Born Alexander Hughes, Judge Dread had two notable milestones in his career. He had the most songs banned by the BBC for their lewd and saucy content while at the other end of the spectrum; he was the first white artist to have a reggae hit in Jamaica. Sadly he died of a heart attack, aged 52, after leaving the stage at the end of a performance.

On 6 March, Jeff Bridges new film, *The Big Lebowski* premiered in the USA to critical acclaim. It tells the story of a case of mistaken identity between loafer and bowler Jeff "The Dude" Lebowski (Bridges) and a millionaire with the same name. The film also featured a rug soaked in urine, a kidnapped wife, and a ransom plan that goes amiss.

» [Arcade] The Fighting Vipers are back in the arcades and better than ever. The only console conversion, a creditable port to the Dreamcast, followed a few years later.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Dragon Trek

"LET'S GET STARTED. WE'VE GOT A CIVILIZATION TO REBUILD."

#86

» SALAMANDER SOFTWARE » DRAGON 32 » 1982

My friend Matt had *Dragon Trek* on the Dragon 32, and much as I liked to make fun of him for owning such a stupid computer, *Dragon Trek* was a pretty good game. Based upon the *Star Trek* mainframe game of the Seventies, it involved warping around different sectors of the galaxy blowing up Klingons and docking with star bases.

I loved it because it allowed me to live out my William Shatner fantasies… not those sorts of fantasies you filthy minded lot, but rather Kirk-based captaincy fantasies. In *Dragon Trek* you were truly the commander of the Starship Enterprise. You could choose where it went, and who it fired upon, and it even allowed you to take care of damage control. Sadly it didn't allow you to beam down to planets, to lets say, 'introduce yourself', to green women, but you couldn't have everything.

It also had some really nice touches. My favourites were as follows – in no particular order: Photon Torpedoes that you could control with the analogue joysticks, with them satisfyingly blowing up anything they got in contact with; a self destruct system that needed a code, just like in *Star Trek 3: The Search For Spok*; an escape capsule that went to the nearest star base, and I think allowed you to continue in a different ship, with a different name. All of these things really made it quite exciting.

I remember me and Matt sitting in his bedroom planning our strategy together, like real Starfleet officers aboard a starship. The graphics weren't exactly great, but they allowed our imagination to run wild. *Dragon Trek* didn't patronize its player either, there was no save game feature, so you either finished it in one sitting, blew up, or gave up.

If there was an equivalent ZX Spectrum game I never found it, and still fondly think of *Dragon Trek* of one of my favourite games from my childhood.

IAN MARKS

THIS GAME
HAS WORKED
40 DAYS
WITHOUT AN
ACCIDENT
EXIT

Ultimate Guide Lemmings

When a game disavows responsibility for loss of your sanity, hair or sleep, it's easy to dismiss it as hyperbole – but for Lemmings, it was closer to an understatement. Nick Thorpe looks back on DMA Designs' critter-saving classic

If you ever imitated another child's bad behaviour when you were young, you were almost certainly asked: "if your friend jumped off a cliff, would you do that too?" Of course, if you were like us you'd claim that you would in order to remain logically consistent, an act of dishonesty which only further frustrated the adult and saw us frogmarched to the nearest cliff. But if you were a lemming, that statement wouldn't be a lie – those guys just love chucking themselves off objects. They also love wandering into jets of flame, drowning, and generally doing very un-clever things. Not real lemmings, mind – their suicidal urges are something of a misconception – but the critters found in DMA Designs' *Lemmings*.

The 'save-'em-up' premise behind the game plays into the popular misconception that lemmings are suicidal creatures. A large group of tiny lemmings will be released into the stage at varying intervals, and continue to walk aimlessly forward until they either hit an object and turn around, or are given a job by the player. Of course, most of the time this aimless wandering won't just get them nowhere near their goal, but will quite often lead them into all manner of horrible situations, be it plummeting off a cliff, walking into jets of flame, drowning or simply becoming trapped in a situation they can't escape. This is where the job roles come in – these allow the lemmings to forge a path towards the goal by smashing up the scenery, climbing ▶

CLIMBER

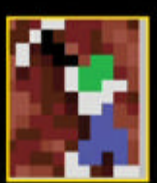
FLOATER

BOMBER

BLOCKER

BUILDER

BASHER


MINER

DIGGER

Q&A MIKE DAILLY

R&D and level design, Amiga version

The walking animation for *Lemmings* was the product of a self-imposed restriction of 8x8 pixels. Do you think this particular approach is useful in aiding creativity?
Actually, it wasn't a self-imposed limitation, it was purely technical. In the old days, you always wanted to draw things using the power of two sizes (8, 16, 32, 64 and so on), so the next size down from 16x16 was 8x8. So it was to fit within 'standard' limitations that started all this – as was normal then. As it happened, only the width mattered on the Amiga, so the resulting size of 8x10 was fine as well.

What was the most difficult aspect of creating *Lemmings*?
There were a few issues. Making the lemmings walk and move exactly, binding feet to ground rather than sliding, actually getting collision working on a pixel basis was tricky – and in fact, *Lemmings* never worked totally for 'steel' things. On console it was a nightmare of the highest order. The five screen bitmap was utterly horrible, and I am still amazed they managed to port it to the Game Boy!

***Lemmings* is known for its difficulty. Did any of the levels keep you puzzled for ages?**
Nope. By the time we were churning out levels, we were all so good very at it, we could solve any level in seconds – pretty much. The only tricky bit was actually doing the level, but even then most would be solved in only a few attempts.

Which of your levels is your favourite and why?
It's Hero Time is my all time favourite, because it had a little bit of lateral thinking, and was far from obvious as to how you do it. Lots of people – including testers at Psygnosis – got utterly stumped on it, which makes me happy.

With the benefit of hindsight, is there anything about *Lemmings* that you would have done differently at all?
Tech-wise, *Lemmings 2* solved everything as far as console went, but game-wise… it would have been nice with a background.

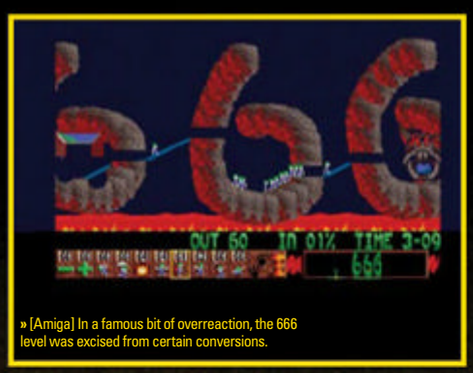
Have you ever had any memorable interactions with *Lemmings* fans?
We would occasionally get sent odd *Lemmings* items. Pillows, drawings – even wood carvings! I do meet some at shows, and that's always fun. What gets me most though, is the love of the game even after all this time. Seeing weird *Lemmings* 'things' happening – like the group that walked around a computer show one after the other dressed as lemmings – being Blockers and the like. That makes me smile!

▶ it, influencing the direction of other lemmings and surviving otherwise deadly situations. Each level has a set quota of idiotic lemmings that must be saved, as well as a stress-inducing time limit within which it must be done.

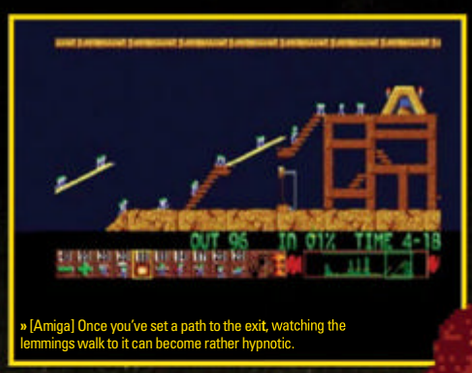
Despite the fact that *Lemmings* is a somewhat complex game, it provides an excellent example of a design principle that has fallen out of fashion over the years – education by level design. The early stages in the 'Fun' difficulty mode offer very simple puzzles that perfectly demonstrate the function of each job role as well as various objects within the game. While a short sentence might be given as a hint, the game doesn't hold the player's hand by any means. Even novice players can experience some degree of success, providing a crucial feel-good factor that hooks players on the game early. This also means that by the time players hit the stages where the challenge really begins to ramp up, they're well beyond the point of questioning how they should be playing, and only have to worry about finding a solution. While the difficulty curve isn't perfectly smooth, *Lemmings* does a great job of matching difficulty to player experience.

The genius of *Lemmings* is that while stage design provides some of the challenge, the rest is delivered by simply restricting the resources you're given to complete a challenge. A great example of this is found in the difference between an early level titled, Builders Will Help You Here, and the game's first truly challenging stage, Postcard From Lemmingland. The former stage gives you nothing but builders, and the solution to the stage is extremely obvious even to novice players. It's even possible to save every lemming, simply by having them build a stairway out of the pit that a few will inevitably tumble into. Postcard From Lemmingland provides exactly the same terrain, but drastically alters your options, ▶

» [Amiga] Early stages introduce players to the various jobs while providing little peril, which introduces a gentle difficulty curve.



» [Amiga] In a famous bit of overreaction, the 666 level was excised from certain conversions.



» [Amiga] Once you've set a path to the exit, watching the lemmings walk to it can become rather hypnotic.

CONVERSIONS

BEST — Covering every version would take the whole magazine, so we've picked the biggest hits and misses — **WORST**

COMMODORE 64

■ Despite utilising a multiload system, the game impressed many by flinging around up to 50 lemmings, as well as including a massive 100 stages – surpassing the Spectrum and Amstrad versions, meaning this is the one to go for on 8-bit computers.

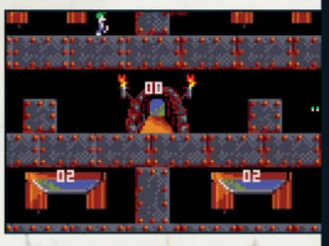
PLAYSTATION 2

■ Based on Team 17's PSP version of the game, *Lemmings* for the PS2 is an updated version of the original game, with all 120 original stages plus 36 brand new ones. The star attraction is the EyeToy mode, which provides users with some surprisingly smart motion controlled stages to play.

MEGA DRIVE

■ The Mega Drive version isn't the most accurate conversion, in part because of limitations on the width of levels, and it is missing some of the original Amiga stages. However, Sunsoft managed to make it up to Mega Drive owners with a number of exclusive stages, bringing the grand total up to a staggering 180.

ATARI LYNX



■ While some of the stage designs have had to be squashed vertically in order to fit the lower resolution, the Lynx conversion of *Lemmings* is one of the best, which should be expected as it was handled in-house at DMA Design. Of particular note is the ability to fast forward play, an appreciated inclusion.

MASTER SYSTEM

■ A stunning job was done with this 8-bit conversion. Pixel destruction made it into the game intact despite the constraints of the hardware. The game also contains 120 levels, though some have had to be simplified, as well as some new music alongside the original tunes we enjoyed so much.

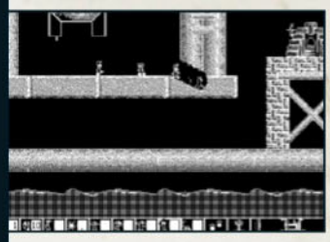
GAME BOY COLOR

■ This should be an improvement over the surprisingly decent monochrome version, as it boasts the *Oh No! More Lemmings* levels and colour graphics. Unfortunately, it has major issues – poor scrolling being the primary complaint. However, the most unforgivable sin is the omission of the excellent original music.

NES

■ The NES struggles to provide a good game of *Lemmings*. 20 levels are missing and only a paltry 14 lemmings can be active at any one time. However, the real issue is the control scheme, which requires you to confusingly hold the B button to select skills rather than just selecting from the menu.

MAC

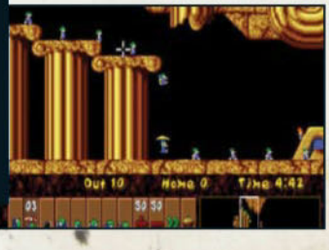


■ In many respects, playing *Lemmings* on a Mac is a surprisingly good experience. The higher resolution graphics are particularly good. Unfortunately, some stages – notably Pea Soup, become almost impossible due to your inability to distinguish between objects and the dangers.

AMIGA CD32

■ It's the Amiga version of *Lemmings* – but on CD! This sounds fantastic, but what does it mean in practice? Not a lot. Two-player mode is gone, and there are no enhancements for the new format. Now consider that this version arrived in 1994, well after the sequel, but still came out at full price...

PLAYSTATION



■ You'd expect that a machine as powerful as the PlayStation should be able to do a perfect version of *Lemmings*, right? Unfortunately, the PlayStation version of *Lemmings* and *Oh No! More Lemmings* is actually missing stages and doesn't use the original graphics. A missed opportunity.

» [Amiga] Some traps such as flame jets initially appear as level decoration, before taking a more active role as hazards.

providing only a single builder and a variety of other skills to get the job done. Suddenly, the stage becomes a lot more difficult and requires some very creative uses of skills to make it through – for example, you'll need to figure out how to turn a lemming around without any blockers.

If that sounds frustrating, you're not wrong – *Lemmings* is a game which is inherently frustrating, and as repeated attempts to clear tricky levels bear no fruit you may find yourself pulling your hair out. However, the game has a number of excellent features which bring down your stress levels. The first is the fact that the lemmings themselves are so cute. Being comprised of only a few pixels each, you wouldn't expect them to have a great deal of personality, but the animation really draws you into their plight as you watch a lone lemming bravely climb a tall object or mine a path for the others. The simple act of watching so many of them at once can in fact be rather mesmerising, as they travel the undulating terrain.

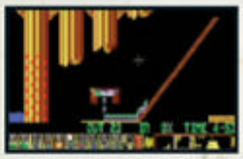
Then, of course, there's the music. Originally composed by Brian Johnston, a number of replacement tracks were added by Tim Wright at the request of Psygnosis, which had become worried about music copyright. The result is that the game uses many popular public domain songs, including classical compositions and staples such as *London Bridge Is Falling Down*.

» [Amiga] In most versions, you can quit without nuking – but that doesn't carry the same satisfaction.

» [Amiga] Complex designs posed problems for coders when converting *Lemmings* to other systems.

Q&A RUSSELL KAY

Programming, PC version



How did you end up working on the PC port of *Lemmings*?
Well Dave Jones and I were working on Spectrum games together before he started DMA Design and bought his Amiga, so I graduated from the Spectrum to the PC (the processors are similar) and did PC ports for DMA, so it became my machine. When *Lemmings* came around, I did the original demo on the PC but I had my finals at University to do before I could give the game my full attention, so Dave started the game and I returned (having finished my finals) and got going on the PC port.

What technical challenges did you face?
Well there were a few: a lack of PC hardware support, the Amiga had a Blitter, I had a poor CPU; the lack of colours, initially we were doing EGA only, though we eventually did a VGA version; there was a shortage of memory, you could only reliably get around 512KB of main RAM on a PC back then; the was also a myriad of PC types out there, with varying RAM, graphics capabilities and disk sizes. We were essentially doing four different versions (EGA/VGA, CGA and Tandy), and having to cope with a lack of two mice, for the much lamented lack of two player mode, I'm still sore about that one…

We shared a lot of code back and forth with me doing some of the skill types (Walker, Climber that sort of thing) and the basic structure of the code is the same, I had to do a lot more with the various components that the PC had, with an attempt at interrupts to get a reliable raster split – I really wish I had not done that…

How do you feel it compares to the Amiga version?
I am very pleased with it, it holds up really well over time and it worked very well for PCs of that era.

What's the best version of *Lemmings* and why?
I think they both hold their own – over time I see that the PC version is the best known one, mainly because it had the largest audience. It is only in Europe that the Amiga one is well known, though there are still a lot of PC users over here.

Why do you think the game remains so popular with gamers?
Simplicity – the gameplay is easy to get, it is simple to pick up and the game itself has a good learning curve (we worked hard at that), so it is easy to get into…

Finally, we'd like to hear an anecdote of your time working on *Lemmings*.
At the time when we were looking for a publisher everyone we showed it to loved it, but thought it was too much of a risk to publish it. Even Psygnosis did initially, it was only later that Dave managed to persuade Ian Hetherington that it was worth the risk!

Not only was the result catchy, but weirdly effective in reducing stress – after all, it's hard to stay mad at a game which is playing *How Much Is That Doggy In The Window*. The sound effects also added to the cuteness of the lemmings, as they had high-pitched voices which would play at the beginning of each stage ("let's go!") and when you needed to make them explode ("oh no!").

Sorry, did we say 'needed' to make them explode? That might have been a tad disingenuous, because while it's certainly true that you'll need to use the occasional bomber to blast through some of the game's 120 levels, most of the time exploding lemmings were simply the result of player frustration. When a stage is lost, or you have a few blockers that need disposing of, or even when you just feel like it, the nuke button is your best friend. A double-click on it will activate a five second countdown for every lemming on the screen and result in a screen full of violently shaking critters, followed by a round of explosions that would please even Michael Bay. While this has become the default option for quitting a stage, the truth is that most versions of *Lemmings* actually have a non-nuclear option to quit the stage – they're just almost never used because nuking is far more fun.

Speaking of rarely-used options, one of the best features of the Amiga original was the two-player mode of *Lemmings*. This took place across 20 specially designed stages and saw players competing to rescue the most lemmings. While you could only assign jobs to your own lemmings, the competitiveness of the two-player mode arose from the fact that you could direct your opponent's lemmings into your own base, effectively stealing them. It's a fantastic design but it was often difficult to replicate on other systems, and is usually the first aspect of *Lemmings* to be scrapped during porting.

» [Amiga] Often, your main problems is keeping the other lemmings safe while letting the useful ones do their jobs.

Q&A TIM WRIGHT

Music, Amiga version

How did you originally go about composing the music for *Lemmings*?

Firstly, I had the basic premise of adapting well-known hummable folk tunes, to replace existing tracks that were problematic in terms of copyright, like the theme from *Batman* for instance.

Secondly, I was a dab hand at Karsten Obarski's Soundtracker and the follow-up called NoiseTracker, but I was told to write the music in a supplied tracker program – Linel's Sound FX if I recall correctly.

Thirdly, there were tight restrictions in terms of memory, permitted musical effects within the editor (i.e. none) and only three channels so that there was always one channel free for sound effects.

Brian Johnston had composed all of the music at that point, but they'd removed several of them for legal reasons. Some of his tunes remained, and they're also well remembered… like *Ten Green Bottles*, *The Can-Can Theme*, *How Much Is That Doggie In The Window?*, and his original tunes too.

The memory constraint meant that there wasn't much room to have samples per track, so there was a bit of instrument sharing. However, this eased up a bit towards the end and I was asked to create cover versions of well known Psygnosis music to be included within the game – tracks from games like *Menace* and *Shadow Of The Beast* – tricky stuff when you've only got three channels and a lot less memory than the originals.

I kinda chose which classic songs to cover at random… whatever popped into my head really; old folk melodies, Christmas hymns and so on. There were some original compositions in there too, just to spice things up a little, along with some mash-ups where I'd blend two tracks, or adapt known themes with my own melodies.

How long did it take and what problems (if any) did you encounter along the way?

I recall it took around a week or so, as there was a pressing deadline. But then I got a few more days to create the Psygnosis game cover versions I mentioned earlier. I didn't really encounter any problems during the composition phase, aside from trying to get the most out of the samples I shoehorned in to the available memory. There are well known tricks you can use with the likes of NoiseTracker, but none of that was allowed... I could only trigger notes, so it was hard work in that respect.

Were you involved with the sound effects of the game and who supplied those voices?

I was brought in towards the end of the project, so the sound effects were all done and dusted at that point. I believe the original *Lemmings* were voiced by Scott Johnston's Mother, and then played back at a much faster speed to give them that classic chipmunk sound.

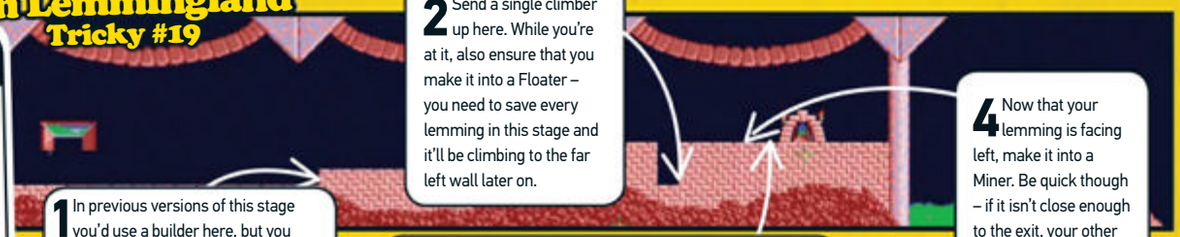
Why were there so many remixes of classic tunes?

I think Psygnosis were quite keen on the idea that the tunes were rip-offs from TV shows, and other well known folk or public domain tracks. But they didn't want any nightmares in terms of copyright and law suits, so I suggested we just stick to well known music that was out of copyright. So there were some riffs taken from folk tunes, classical music, religious hymns and so on.

TRICKY TERRAIN

These are some of the most infamously difficult levels Lemmings has to offer, alongside some helpful tips

Postcard From Lemmingland
Tricky #19



RESOURCES	
x10	x1
x10	x1
	x1
	x1

1 In previous versions of this stage you'd use a builder here, but you only have access to one now. Use your Basher instead, to clear a path to the pit for all of your lemmings.

2 Send a single climber up here. While you're at it, also ensure that you make it into a Floater – you need to save every lemming in this stage and it'll be climbing to the far left wall later on.

3 This is the trick of the stage. Use your Digger straight away before the exit, and then assign it as a builder immediately. It'll reach the side of the small hole it just dug and turn around.

4 Now that your lemming is facing left, make it into a Miner. Be quick though – if it isn't close enough to the exit, your other lemmings won't be able to reach the tunnel to freedom.

Triple Trouble
Taxing #26

RESOURCES	
x10	x12
x10	x10
x10	x10
x10	x10

1 With your first lemming, dig a hole slightly to the right of where it landed – this will ensure you save the ones at the top without any undue worries.

2 Start a Builder off in this corner, and keep it in action until it reaches the stone circle. To protect your other lemmings, dig a hole beneath where the new lemmings are falling in.

3 Once your Builder has reached the stone circle, have him bash his way through it and create a path to the exit.

4 Use a Builder to repair the hole you dug earlier, completing the path. Now all you have to do is repeat this process on the other side!

Down, Along, Up. In That Order
Mayhem #5

RESOURCES	
x2	x5
x2	x1
x10	
x10	x5

1 Send a climbing Floater over each side of this structure and block off the fire pits at each end of the level. To free the rest of the lemmings, dig at the left and right alternately.

2 You may wish to use a Blocker to keep a small group of lemmings aside here for visibility – ten should do. Have a Builder work its way up to this first ledge.

3 Create a Blocker to stop your lemmings from going over the edge, then start a builder towards hitting the Blocker. It'll turn around mid-build and keep on working!

4 Rinse and repeat, remembering to ensure that your Builder will hit your Blocker and turn around while continuing to build. Free any remaining lemmings by removing Blockers and finally, exhale!

No Added Colours Or Lemmings
Mayhem #20

RESOURCES	
x2	x1
	x1
	x2
x1	

1 Once your second lemming reaches this spot, assign it as a Blocker. You need to rescue all lemmings here, but don't worry – you will rescue this helpful chap later.

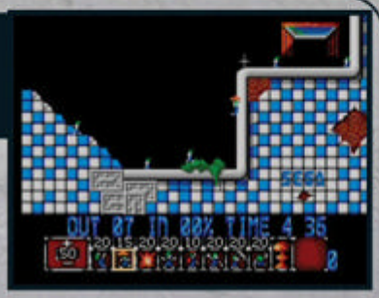
2 Use the first lemming which you singled out from the pack, bash through this wall to create a path towards the exit.

3 Wait until the lemming reaches the edge of the platform to assign it as a Builder – it needs to hit the wall so it'll turn left when it's done.

4 Finally, assign your lone lemming as a Miner to tunnel under the Blocker you assigned earlier, which will free it. Once it's done, make it into a Climber and you're golden!

Q&A DOMINIC WOOD

Programming, Master System and Game Gear



Had you played *Lemmings* before starting work on the conversion? If so, what did you think of the game?
I had played it (PC version I think) and I enjoyed the game, although I wasn't addicted. My friend's granny used to play it apparently! It's one of the first crossover casual games. When I was developing I didn't have time or the eye sight to play games in my spare time as I didn't have much. However when we had the contract we used to play it a *lot*.

What were the major challenges Probe faced in converting *Lemmings* to Master System/Game Gear?
Firstly, how to build a destructible/buildable landscape with a character based screen system with a limited number of characters, that was interesting. Secondly, how to get that mouse feel with a game controller. I spent a lot of time and effort on that, adjusting the acceleration/deceleration and coding immediate response with a change of direction, it was commended in the reviews. My aim was to beat the team working on the Game Boy version.

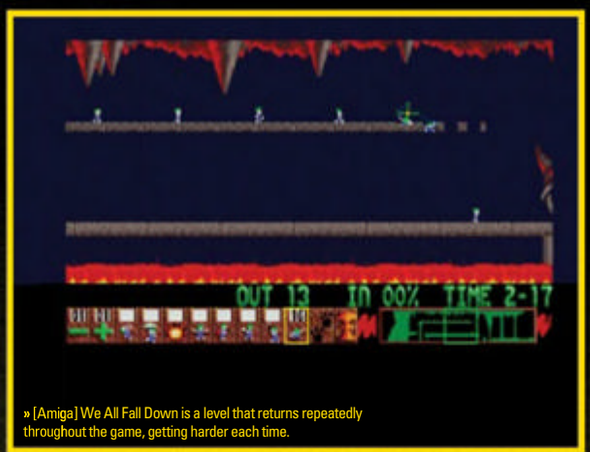
How much contact did Probe have with DMA/Psygnosis during the conversion process?
Not a lot from what I remember, I guess the original was coded by another external team, it would have been good to have hooked up with original dev team. But in those days, conversions were passed out and you certainly wouldn't be involved. Sega Japan sent a funny email on something we missed a day before production; it was completely true but would have meant a complete 100 level re-test so we didn't implement it.

Why do you think the conversion went so well?
Great game! We had a good team Neil Young (EA, ngMoco, N3twork) managing although I don't remember him having to chase us that much, it was also the first game Rob O'Farrell worked on as test, he's a big cheese at EA UK now.

The popularity of *Lemmings* during the early Nineties was enormous. The initial Amiga release was followed by conversions for what seemed like every format available, from the 8-bit computers and consoles to the rather more exotic likes of the CD-i, SAM Coupé and Sharp X68000, and even the new generation of consoles such as the 3DO. Despite the fact that we've singled out some versions of the game for praise and criticism later in this feature, it's worth noting that the core experience is so strong that you'll probably have fun with any you care to pick up. The popularity of the game was accompanied by massive critical success, with many reviewers recognising the clever puzzles and addictive qualities of the game.

An expansion pack titled *Oh No! More Lemmings* soon followed, but was much less widely available than the original game, appearing on PC, Atari ST, SAM Coupé, Macintosh and Acorn Archimedes. The levels were also present in the Game Boy Color, PlayStation and Mega Drive versions of the game in varying number. Also of interest to *Lemmings* enthusiasts are the excellent Christmas *Lemmings* demos given away on magazines, which provided brand new winter-themed stages for players – a rather excellent Christmas present in itself.

"As well as the addictive, multitasking game play, ingenious use of physics and black humour we (the artists) loved how the DMA guys managed to cram so much character and fluid animation into an 8x8 pixel figure, it really brought the game to life. A lost art these days" Jeff Bramfitt, Psygnosis

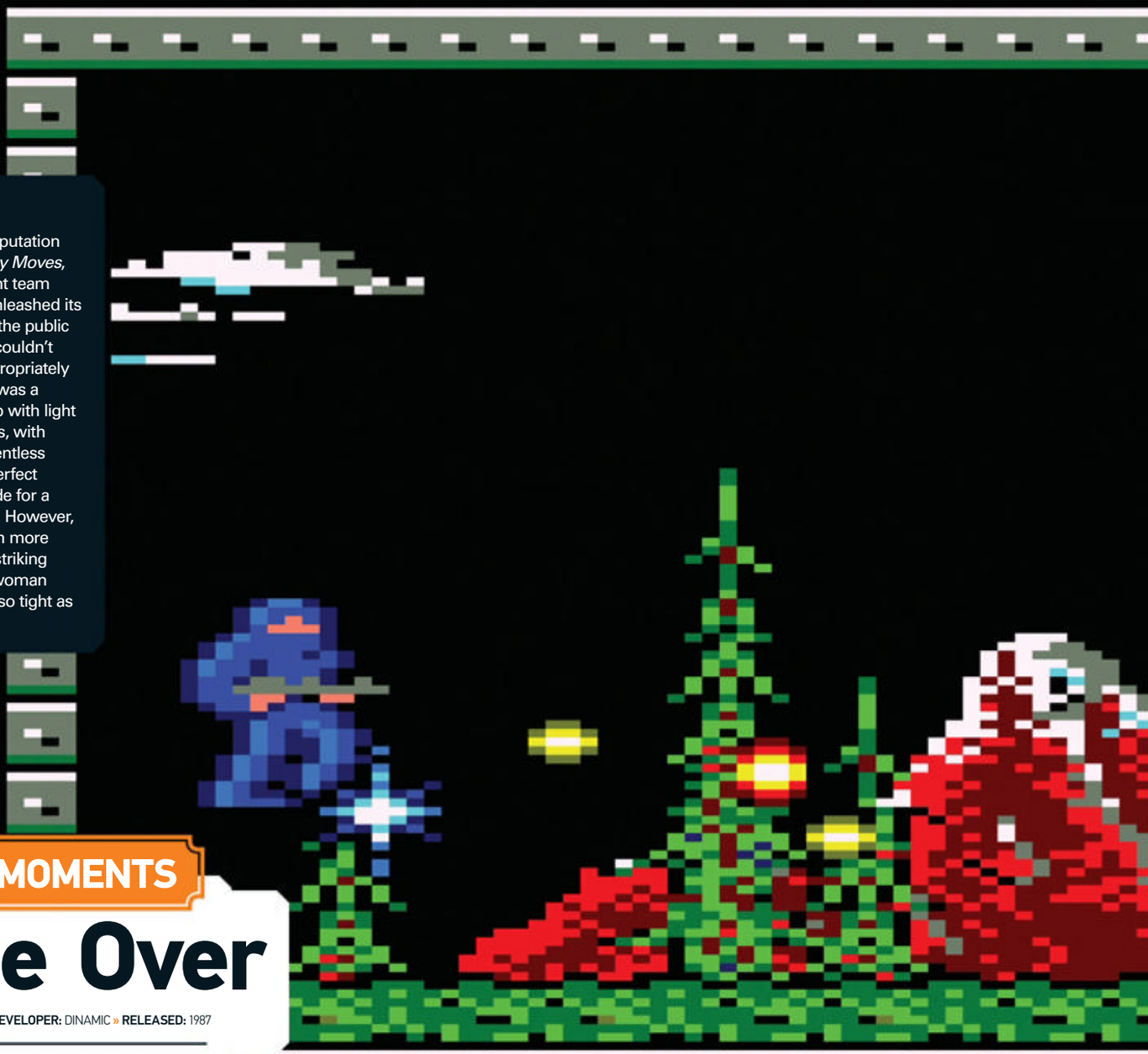


» [Amiga] We All Fall Down is a level that returns repeatedly throughout the game, getting harder each time.

Lemmings is still a unique game – even other save-'em-ups like *Chu Chu Rocket* resemble it only tangentially – and one which ranks alongside the likes of *Tetris* as one of the few games that can claim to have near-universal appeal. At a time when games were marketed almost exclusively to young males, *Lemmings* found popularity with all audiences. The cute characters were appealing in a way that was easy for anyone to understand, and the game gently eased players in, so even if you'd never played a videogame before you could probably get the hang of *Lemmings*. And once you were in, you were hooked – *Lemmings* is a strong game design which could keep players playing long into the night. In fact, we think we can hear an enthusiastic cry of "let's go!" right now – though that might just be our addiction kicking back in. Okay then, one more go...

BIO

Having built up its reputation with games like *Army Moves*, Spanish development team Dinamic Software unleashed its latest creation upon the public in mid-1987 – and it couldn't have been more appropriately named. *Game Over* was a difficult shoot-'em-up with light platforming elements, with a combination of relentless enemies and pixel-perfect platforming that made for a brutal difficulty level. However, the game drew much more attention for its, err, striking box art, featuring a woman whose clothing was so tight as to reveal a nipple.



CLASSIC MOMENTS

Game Over

» **PLATFORM:** AMSTRAD CPC » **DEVELOPER:** DINAMIC » **RELEASED:** 1987

In most games, being killed by the first boss is a shameful anti-achievement. In *Game Over*, simply reaching the boss is a badge of honour. The game starts as it means to go on, with overwhelming odds stacked against the player from the very first screen – even during tricky platform sections, no respite is available to you. Given the difficulty involved in reaching the boss, you might be inclined to think it will be a pretty monstrous creation, and you would certainly be right.

Game Over's first boss is a hulking great green ogre, and seeing it for the first time is a classic panic moment, which is immediately backed up with an unrelenting attack. But when you're confronted with giant enemies in these games they're usually pretty immobile, so you have the manoeuvrability advantage, right? Wrong. The enormous threat is actually quite capable of leaping about, and its massive width effectively pins you into a very small corner of the screen when it does so. Get ready to chuck some grenades at it – you'll definitely need them.

MORE CLASSIC GAME OVER MOMENTS

That Loading Screen

While a loading screen should never be the highlight of a game, *Game Over*'s was particularly memorable. The loading screen was a rendition of its infamous box art, and was the best part of the game for many an Eighties teenager. We won't judge you though, as we're pretty sure it's the main reason people bought the game to begin with…

Menace, Multiplied

What's worse than an enormous boss? Multiple enormous bosses. After making a pixel-perfect leap across a chasm, you're attacked by massive robot enemies, which will do some major damage and soak up loads of grenades before they die. Thankfully, if you can withstand the assault you'll be finished with the first half of this punishing game.

Pick-Up Power

Some power-ups are just better than others – it's a fact of gaming. We would much rather have a full health refill than a slightly better gun, you know? Still, even the weediest power-up is a huge help in *Game Over* and you are going to be grateful every time you see one, even if it's not the magical floating heart that will save your life, it is still better than nothing.

Enemy Territory

Getting into the enemy lair in any game usually signifies that the end is near, which is cause for a mixture of anticipation and relief. However, it's more significant than that in *Game Over* as it also indicates a late gameplay shift – from now on, you'll have to navigate a maze instead of the linear environment you've been dealing with.

Jets

The game that dropped a bombshell on the CD32's launch lineup, Jetstrike was an arcade flight sim oozing with detail and wacky humour. Mike Bevan speaks to creators Aaron and Adam Fothergill

IN THE KNOW

» **PUBLISHER:** RASPUTIN SOFTWARE

» **DEVELOPER:** SHADOW SOFTWARE

» **RELEASED:** 1994

» **PLATFORM:** AMIGA, AMIGA CD32, PC-DOS

» **GENRE:** FLIGHT-SIM/SHOOT-'EM-UP

The idea behind *Jetstrike* is a simple one: pick any plane from the dozens available in your hanger, load it up with weapons, and fly out across a scrolling landscape, dealing out as much damage to the enemy SPUDD (Society of Particularly Undesirable Dastardly Dudes) installations as possible. And if you end up going down in a huge fireball and bailing out, pick another aircraft and do it all again. A mixture of *Defender*, *Harrier Attack* and every *Top Gun* cliché you ever heard (in a good way, mind) it's silly, hard as nails and absolute buckets of fun. For the creators, Aaron and Adam Fothergill, it was the culmination of projects that started on the Apple II, which moved to the Atari ST with a game called *Skystrike*, and it ended with the CD32 title that *Amiga Power* would name as the 28th best game of all time.

"My Dad was in the RAF, and me and my brother toyed with wanting to be pilots," recalls Aaron, *Jetstrike*'s coder and mission designer. "At the time I wanted to become a recording studio engineer but I was good at computer [programming], so eventually I decided to focus on computers. And then my dad got posted to Hong Kong and we got an Apple II clone. That's when I wrote *The Ace*, which was a World War I fighter pilot game that later turned into the games *Skystrike* and *Jetstrike*."

Away from the UK for several years, Aaron admits that he never got to see games like *Harrier Attack*, with one of the inspirations behind his foray into computerised aviation being an early American Apple title. "I had played a competitive multiplayer game called *Dogfight*," he tells us. "It had these simple rotational controls and when you got shot down you bailed out. If you survived, you respawned but if someone shot your parachute, you died. It was a really fun game."

"I also got into *Joust*, and *The Ace* was the first variant of what we did with *Jetstrike* where we did it side-on, and it was all about the dog-fighting tactic of getting above someone to shoot them. Also all the things you see in aviation movies where people crash-land or bail out just before their plane explodes. I did a WWI version with biplanes and a jet-based one, with a single aircraft in each game. It was very simplistic, just flick-screen stuff, but it was just a really good learning project."

"When we got back to the UK, Adam got an Atari ST and I hijacked it and started messing around with GFA BASIC. I wrote a version of *The Ace* where Adam started doing 'proper' graphics because everything up until then had really just been coder art." These experiments led to *Skystrike*, a World War II flying game written as an

JETSTRIKE

HOW TO WIN THE WAR

Eight of the most useful planes in the game. Plus a hang glider and a dragon

HURRICANE

■ One of Aaron's favourite aircraft, the venerable Hurricane shot down more enemy planes than the Spitfire in the Battle of Britain. In *Jetstrike* it also seems to be able to take a few more hits than the Spit due to its wooden airframe.

HARRIER

■ This British marvel was made famous by for its role in the Falklands War as well as a star turn in the Arnie movie *True Lies*. Its VTOL capabilities give it the ability to hover like a helicopter while retaining the speed and agility of a jet.

GRUMMAN GOOSE

■ The Grumman Goose was used as an amphibious transport plane in World War II, and also by the United States Coast Guard. It's a sturdy platform for recce missions with the added bonus of being able to ditch safely on water.

F-15 STRIKE EAGLE

■ This multi-role fighter-bomber is able to carry a huge loadout of bombs and other assorted weaponry should you desire. Armed with a cannon and decent payload of Sidewinder missiles it also makes excellent in dogfights.

A-10 WARTHOG

■ Along with the Russian Frogfoot this is probably the best ground attack aircraft in the game, although its tank-busting chain-gun is a little weak against the enemy aircraft. Its thick armour also means that it can take a lot of punishment.

MIG-29 FULCRUM

■ An extremely agile Soviet fighter jet which is more than a match for the American F-15 and F-16, the Fulcrum has the added advantage of a computer-aided gun targeting system, giving it an accurate edge in dogfights.

SU-27 FLANKER

■ Like the MiG-29 the Flanker was designed to take on the advanced American fighter aircraft of its time, being heavily armed and armoured, not to mention it was supremely manoeuvrable. It also has a similar computer-guided gun.

KA-50 WEREWOLF

■ A Russian attack helicopter with a distinctive twin coaxial rotor system, the Werewolf is possibly even more fearsome than the American Apache. It's also the only chopper in the game to be fitted with an ejector seat, which is good news for the pilot.

HANG GLIDER

■ It may just be a sheet of tarpaulin with a few metal struts holding it together, but this handy vehicle is almost invisible to radar meaning that it can slip into SPUDD territory on certain undercover missions without being detected.

DRAGON

■ This fire-breathing beastie was created for a fantasy-themed magazine cover-disk before making it into the main game. It can be used for those tricky missions where barbecuing the enemy out of pure wrath is particularly desirable.

» The amount of sprites Adam created for just the Harrier demonstrates the amount of work that went into animating the full roster of planes.

entrant in a programming contest for users of STOS, an AMOS-like programming language for the ST.

"We were absolute plane nuts at the time, I've always been into Spitfires and stuff like that and Aaron was still probably into his Biggles books," chuckles Adam, who produced *Jetstrike*'s graphics and music. "When we came back from Hong Kong we were stationed at Chivenor, an RAF base in North Devon. They had an air show every year and Aaron was recording bits and pieces of audio from the air show to put in the games."

"*Skystrike* really nailed the gameplay down instead of being an experimental messing around game," says Aaron. "The whole thing was based around flying a Spitfire. It was still flick-screen, but there were over 150 different missions. All the stuff I'd worked out in *The Ace* went into that, silly things like flying under bridges and through tunnels or shooting down a duck for the CO's dinner, as well as progress missions of trying to take over enemy airfields"

One feature of *Skystrike* that became an important element of ▶

» [Amiga 500] Despite its pathetic machine gun the Fokker Triplane is loads of fun to fly.

» [Amiga CD32] Deep over the SPUDD-infested jungle things are looking bad for our plucky Tornado pilot.

▶ *Jetstrike* was how the entire game took place in a primitive open world. "Another influence was the original F-15 Strike Eagle, along with F-16 Fighting Falcon on the ST," states Aaron. "Both of those had the idea that you could play tactically, so you could do a main mission but you had the option of taking out secondary targets such as AA guns that made subsequent missions easier. In *Skystrike* you could fly anywhere you wanted and blow things up and they stayed blown up… The principle was the same in *Jetstrike* except it was level-based, so for a number of missions you'd be in the same area, and while you were there the world was persistent."

"*Time Pilot* was another game that I liked but I hated the controls," adds Aaron, "which is why *Jetstrike* has this weird rotational control but done in a different way. That worked out better for some of the stunts you had to do in the game." Nowadays the up-down rotational control system for the planes might come across as a little unwieldy, but at the time it was par for the course. "*Jetstrike* was absolutely, unashamedly hardcore," admits Aaron. "The first few levels were 'learner' levels followed by a few 'cruising' levels where you were just gaining skills, then a 'bastard' level that you couldn't get past it unless you'd really developed your skills. It's an interesting progression curve, and compared to a modern game it's really hard…"

One of the big draws of *Jetstrike* is the sheer number of planes you can fly, particularly in the Amiga 1200 and CD32 versions. Then there's the array of different weapons to try, all based on real-world armaments, from Sparrow and AMRAAM missiles to rocket pods, cluster bombs and laser-guide ordinates. "All the aircraft we'd ever seen and thought should be in a game were in [the game]along with all the weapons," says Aaron. "Looking back now as someone who classifies themselves as a pacifist, I'm almost embarrassed about it! There were oddities like the Gee Bee racer and Fokker Triplane, and we picked some aircraft from watching films like the Pilatus Porter from *Air America* and the A-6 Intruder from *Flight Of The Intruder.* The Harrier was my best achievement in the game once I got the full VTOL controls in it. Technically the most powerful aircraft were the Mig-29, the F-15 (huge weapon load outs) and the A-10 and Frogfoot, which were basically flying tanks. We even put in a actual dragon!"

"The Harrier was my best achievement in the game once I got the VTOL controls in it"

Aaron Fothergill

» [Amiga CD-32] One of the early missions is to destroy this submarine.

The job of creating all the sprites for each plane was Adam's responsibility. "It was all done by hand and I came up with a bit of a technique to draw in perspective," he says. "For any aircraft you could pretty much draw in the wing perspective and put in the detail afterwards. I've never been a strong animator but my aircraft recognition was good. Little things like making sure that the nose-cone on a Jaguar looked correct, because a Jag has a very distinctive nose-cone compared to a Tornado for instance, although when you have about three pixels to do that it in was quite tricky…"

In the game, picking the right aircraft for the right job was crucial, for instance early missions like taking reconnaissance photographs or dropping off spies could be done in light planes like the Porter, while dangerous ground-attack missions were a job for the heavier payloads of the A-10 or F-15. "Part of the tactical approach of *Jetstrike* was only allowing each aircraft to be flown a certain number of times, apart from the really weak training aircraft," says Aaron. "You could pick the best aircraft straight away, but you'd only have a certain number of uses so by a few missions in you wouldn't be able to fly them anymore. So it became important to try and save the better planes for the harder missions later in the game. The last mission is a *Star Wars*-esque 'fly down a narrow tunnel and shoot at a tiny target' one in a mountain base. And I remember testing that mission with the Fokker Triplane, because I was imagining a scenario where that was the only aircraft the player had left…"

DEVELOPER HIGHLIGHTS

BASE JUMPERS
(PICTURED)
SYSTEM: AMIGA
YEAR: 1995

TOTEMBALL
SYSTEM: XBOX 360
YEAR: 2006

ANY LANDING
SYSTEM: iOS
YEAR: 2014

An example of the attention to detail in the game was a little Easter Egg that only one in every million players of *Jetstrike* is likely to have ever seen, the hidden *Macross*-inspired Alien Superfighter. "I remember someone wrote into one of the Amiga magazines and said, 'I was flying really high up in *Jetstrike* and this UFO came down and crashed into me then apologised and gave me this new plane to play with,' and of course the tips guys was like, 'Yeah right, no chance,'" laughs Aaron. "And then we wrote to them and said it could actually happen – you have to be flying at a certain altitude, dead

» [Amiga CD32] Landing your plane was always one of the trickier feats to pull off in the game.

straight, and it's a one in a million chance but if you have enough people playing someone will find it!"

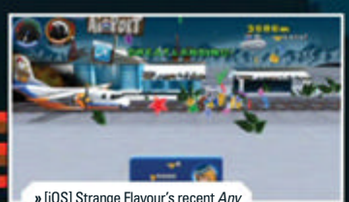
For the CD32 version, the brothers created their own digital soundtrack, one of the first for a computer game. Anyone that's never heard it should definitely check out tracks like *Drop The Bomb* and *Fast Jet Fever*, a spoof of perhaps the only other well-known song by Kenny '*Danger Zone*' Loggins. "I wrote the lyrics and Adam did the singing mainly because he was less bad at singing than me," Aaron laughs. "*Fast Jet Fever* was a mickey-take of *Danger Zone* from *Top Gun*. If you ever read the lyrics to that song it's hilarious, he's actually gone through every gung-ho flying cliché under the sun. So I thought 'I can do better than that!' *Drop The Bomb* was a Beastie Boys-esque 'let's go and bomb stuff' anthem… but it was also around the time Bros were doing their *Drop The Boy*. I guess it could also be thought of as a sort of anti-nuke song with the duel-meaning of the title. In the game if you select the nuke, which you only get a limited number of uses of, the soundtrack automatically switches to that song to give you a hint of what you should do with it…"

» [Amiga CD32] Dogfighting in the F4 Phantom.

The nuke is the ultimate expression of the over-the-top pyrotechnics in a game where enemy targets erupt in a mass of fiery explosions, and your plane goes down in spectacular style resulting in a massive crater in the landscape. "We had been watching a film called *By Dawn's Early Light*, a movie about a B-52 heading to Russia on a nuclear bombing mission," remembers Aaron. "At one point they get a MiG on their tail so they get this crazy idea to drop one of the smaller nukes on the side of a mountain while they duck down the other side and it takes out the MiG. So you can actually do that in *Jetstrike*. The entire sprite budget was spent on blowing up things and of course you could take out targets by just flying your plane into them at high speed, as long as you remembered to bail out first!"

Despite the critical acclaim heaped on the various iterations of *Jetstrike*, notably the CD32 version, Aaron reveals the brothers unfortunately received little commercial gain from their two-year stint creating it due to publisher Rasputin going into receivership. "We were still working from our parent's house but that was actually being repossessed at the time," he reveals. "So it was just a case of cramming out what we could, and if we'd not loved the game so much, we'd have just canned it." The pair managed to put out just one more Amiga game, *Base Jumpers* before their company, Shadow Software folded.

Nowadays, the brothers have returned to creating games in the guise of their new studio Strange Flavour, producing titles like the Xbox 360's *TotemBall* and the multi-million selling *Flick Fishing*, one of the first touch-screen fishing games on the iPhone. *Jetstrike* has served as an inspiration for recent games like *Bushfire*, based on the fire-fighting mission in the Aerolympics section of the game, and *Any Landing*, a plane-themed iOS game where crashing spectacularly nets you the highest scores . "Like a lot of game developers, we like writing the games we want to play," says Aaron. " And what of a new or updated version of *Jetstrike* for the future? "We get asked all the time for *Jetstrike*-style games," says Adam. "We don't actually have the rights to *Jetstrike* itself but we have got an idea in the pipeline for a more *Jetstrike*-like game we'd like to do…" Watch this space folks. ✱


» [iOS] Strange Flavour's recent *Any Landing* was directly inspired by the spectacular crashes of *Jetstrike*.

SIX DEFINING JETSTRIKE MOMENTS

The moments that had us fist-pumping the air

PICKING YOUR PLANE

■ For an arcade style shoot-'em-up the amount of flyable aircraft you get is dazzling, from the 40 different machines in the original Amiga 500 version to around 60 in the A1200 and CD32 releases. And picking the right one for a specific mission is crucial, particularly as some are completely unarmed.

YOU ARE HERE

■ Part of the fun of the *Jetstrike* was seeing what kind of monumentally spectacular (and painful looking) crashes you could achieve, either through enemy fire or your own blind stupidity. And the game would always praise your efforts with a pithy one-liner and point out exactly where you ended up.

BOMBS AWAY

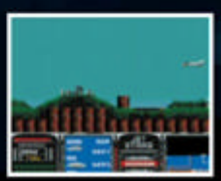
■ One of the most enjoyable aspects of *Jetstrike* is bombing ground targets, from armoured convoys to bunkers, battleships and even SPUDD's propaganda radio station. And there are loads of weapons to try from, you can use Harpoon missiles, tactical nukes, and even a *Dambusters*-style bouncing bomb. Sweet!

TALK TO ME GOOSE!

■ Of course, another highlight of the game is emulating Maverick and taking an F-14 Tomcat out for a spot of dog-fighting, while the Kenny Loggins pastiche *Fast Jet Fever* blares in the background. Although we haven't quite been able to fly upside-down over any MiGs just yet… give us time.

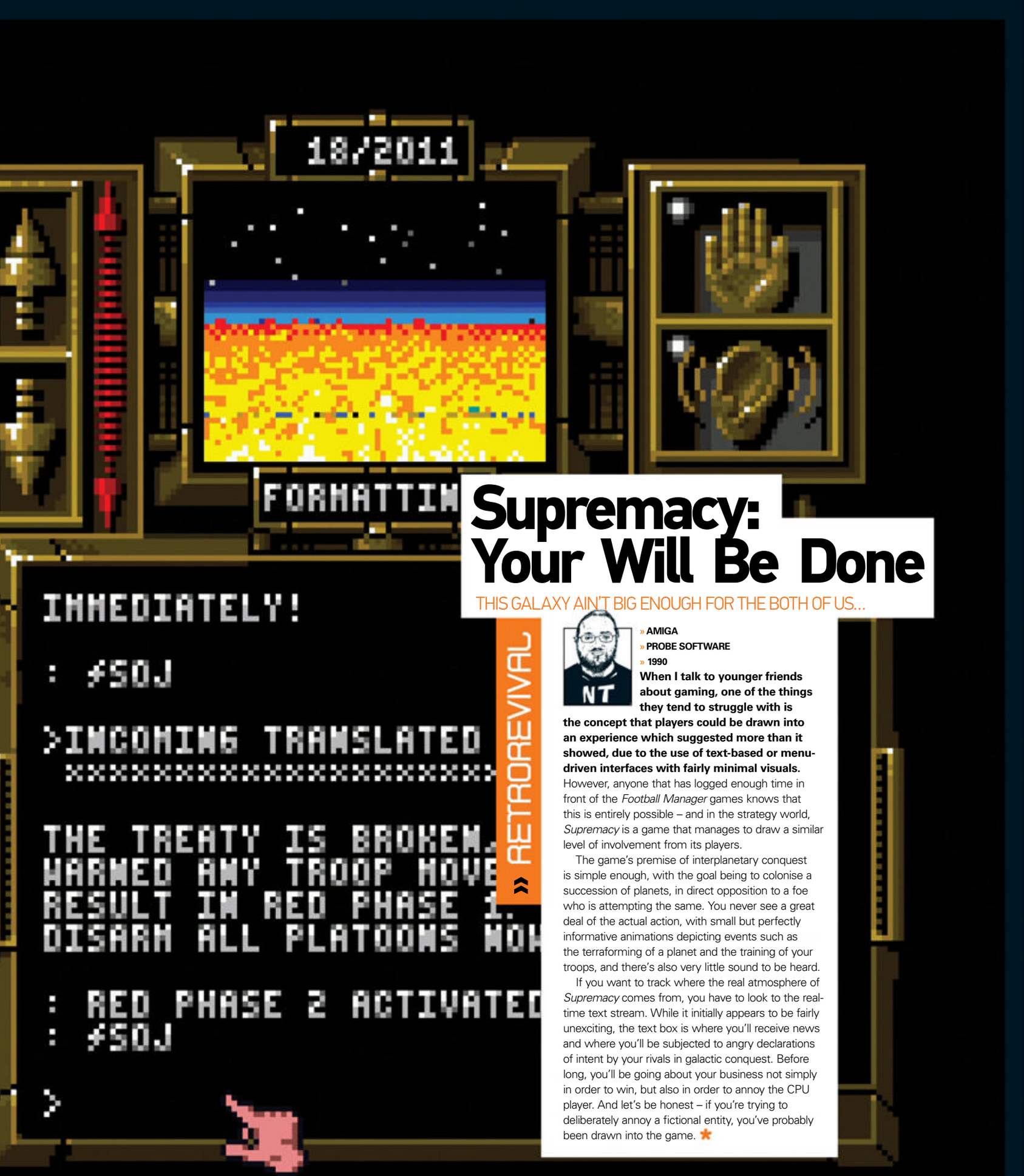
AEROLYMPICS

■ The Aerolympics minigame was a bonus mode where the aim was to fly light aircraft such as the Gee Bee racer and the Acro Star jet (of *Octopussy* fame) in a selection of randomised stunt missions. These included nabbing floating ballons, flying through barns and dropping spies behind enemy lines.



DON'T MESS WITH THE DRUIDS

■ Should you take it upon yourself to bomb the Stonehenge-like monument that crops up early on in the game you'll enrage not only Spinal Tap's Nigel Tufnel but also the local druids. And as a result of your nefarious monument-flattening deeds they'll curse the skies to be foggy forever.



Supremacy: Your Will Be Done

THIS GALAXY AIN'T BIG ENOUGH FOR THE BOTH OF US...

RETROREVIVAL

» AMIGA
» PROBE SOFTWARE
» 1990

When I talk to younger friends about gaming, one of the things they tend to struggle with is the concept that players could be drawn into an experience which suggested more than it showed, due to the use of text-based or menu-driven interfaces with fairly minimal visuals. However, anyone that has logged enough time in front of the *Football Manager* games knows that this is entirely possible – and in the strategy world, *Supremacy* is a game that manages to draw a similar level of involvement from its players.

The game's premise of interplanetary conquest is simple enough, with the goal being to colonise a succession of planets, in direct opposition to a foe who is attempting the same. You never see a great deal of the actual action, with small but perfectly informative animations depicting events such as the terraforming of a planet and the training of your troops, and there's also very little sound to be heard.

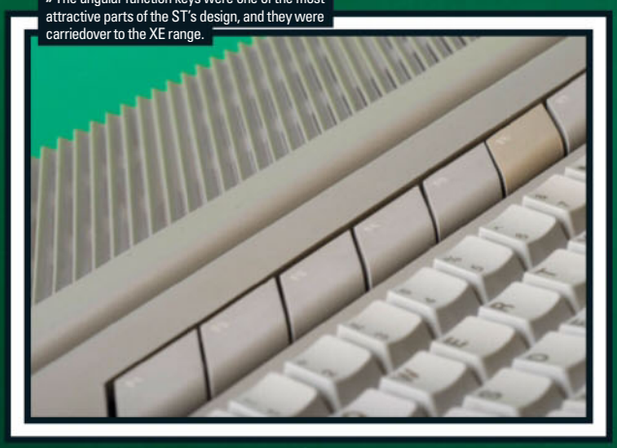
If you want to track where the real atmosphere of *Supremacy* comes from, you have to look to the real-time text stream. While it initially appears to be fairly unexciting, the text box is where you'll receive news and where you'll be subjected to angry declarations of intent by your rivals in galactic conquest. Before long, you'll be going about your business not simply in order to win, but also in order to annoy the CPU player. And let's be honest – if you're trying to deliberately annoy a fictional entity, you've probably been drawn into the game.

ATARI ST

A 30-YEAR LEGACY

The history of the ST has been covered more than once in these hallowed pages. But as the machine turns thirty, our focus turns to its legacy. Just what was it that made the ST so great and why should it be remembered? Kieren Hawken breaks it down

OK



» The angular function keys were one of the most attractive parts of the ST's design, and they were carriedover to the XE range.

» Earlier machines contained a single sided drive, while later models swapped it out for a double sided variation if needed.

"For many, the Amiga kicked the crap out of the ST. But for games like Populous and its sequel, it was much closer to keeping up"

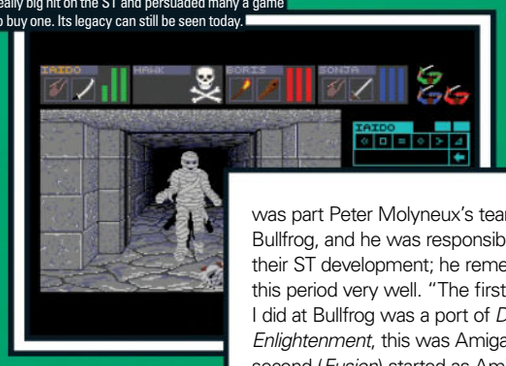
Glenn Corpes

The Games Machine

Perhaps the most fitting place to start this article is looking at the ST as a games machine. While it might not be the computer's biggest or most important legacy, it's what many people remember it for, and, after all, this magazine is called **Retro Gamer**.

Believe it or not, the ST was never really designed to play games, Jack Tramiel's vision of the machine was as an all purpose computer for serious applications like desktop publishing and word processing. The ST was aimed squarely at the best selling Apple Macintosh, this is what led to the machine being dubbed the 'Jackintosh' by the computing press of the time. But as we all know, what you want a machine to be is not always what it turns out to be – just ask Sir Clive Sinclair. There is no doubting that the ST was very capable of producing some very impressive games, not to mention it was much better equipped to do so than the PCs and Macs of the time.

Much of the early support came from Atari itself as it offered up more than competent versions of its vast back catalogue with titles such as *Star Raiders*, *Missile Command*, *Asteroids*, *Millipede* and *Battlezone* being ported to the machine. But it was the release of *Dungeon Master* in 1986 that really made gamers sit up and take notice of the ST. Before long, every major home computer publisher was supporting the machine, and it quickly became the lead development platform for most of said publishers. In fact it wasn't until the very late Eighties that the tables turned in the Amiga's favour. Glenn Corpes was part Peter Molyneux's team at Bullfrog, and he was responsible for all their ST development; he remembers this period very well. "The first game I did at Bullfrog was a port of *Druid 2: Enlightenment*, this was Amiga only, the second (*Fusion*) started as Amiga only as well. At that time I was working as an artist and those two games didn't come close to paying the wages, and nobody was giving me anything to do so I brought my Atari ST in, just to get some more coding practice. I started trying to port *Fusion* to the Atari ST but I got distracted by making an isometric engine (inspired by *Spindizzy*) that became *Populous*. This was then made to run on the Amiga, too." ▶



» [Atari ST] FTL's D*ungeon Maste*r was the first really big hit on the ST and persuaded many a game to buy one. Its legacy can still be seen today.

» The number found on the Atari ST badge denotes the standard amount of memory and the small letters the type of machine

TECH SPECS

	ATARI ST	ATARI STE	AMIGA 500
PROCESSOR	MOTOROLA 68000 @ 8 MHZ	MOTOROLA 68000 @ 8 MHZ + BLITTER	MOTOROLA 68000 @ 7.16 MHZ + BLITTER
PALETTE	512 COLOURS	4096 COLOURS	4096 COLOURS
COLOURS	16 ON SCREEN	16 ON SCREEN	32 ON SCREEN
RESOLUTION	320X200 LOW, 640X200 MEDIUM 640X400 HIGH (FLICKER FREE MONO, EXCEPT AMIGA)		
SPECIAL HARDWARE	NONE	SCROLLING	SCROLLING, HAM, COPPER
SOUND	YAMAHA YM2149 3 CHANNEL MONO	YM2149 + DMA 2 CHANNEL PCM STEREO	PAULA - 4 CHANNEL STEREO
MEMORY	512K STANDARD, UPGRADEABLE TO 4MB	512K STANDARD, UPGRADEABLE TO 14MB	512K STANDARD, UPGRADEABLE TO 2MB
PORTS	RGB/MONITOR, RF, RS232, MIDI IN/OUT PARALLEL PRINTER, DISK DRIVE, CARTRIDGE, 2 X JOYSTICK/ MOUSE, DMA (HARD DISKS)	SAME AS ST PLUS: 2 X ANALOGUE JOYSTICK PORTS, SOCKETED RAM (INTERNAL)	RGB/MONITOR, STEREO, RS232, RCA, PARALLEL PRINTER, DISK DRIVE, 2 X JOYSTICK/ MOUSE, EXPANSION BUS

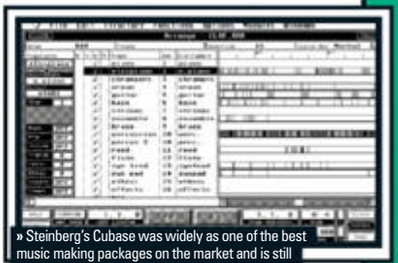
But what did Glenn think of the ST as a games machine? Especially given the limitations it had compared to the Amiga. "It all depended on the game. For many, the Amiga kicked the crap out of the ST. But for games like *Populous* and its sequel, which drew lots of small blocks on 16 pixel boundaries, it was much closer to keeping up. In 3D games like *Powermonger* the ST version was actually faster thanks to the quicker CPU and the way the screen memory is organised." We had to take this opportunity to ask Glenn if anything else became of his clever isometric engine that we didn't see. "Sort of," he says. "I only worked on an ST for a couple of years and in that time [I] wrote *Fusion*, *Populous* and *Powermonger*, so I didn't have much time! There were a few things though, I spent a while on an isometric engine with smaller tiles than *Populous* and more varied slope steepness, I intended this for *Populous 2* but as that game was Amiga first and the engine relied partly on MOVEP trickery we dropped it. I also experimented with an isometric engine that used partial screen updates, as opposed to *Populous*' brute force draw, all the blocks and sprites every frame, that never got very far but the algorithm it used became the basis of *Syndicate* which ironically never came to the ST!"

So one final question for Glenn, why does he think the ST should be remembered? "It was a fun machine to program for, very simple and basic, no blitter or copper or hardware sprites. This meant programmers didn't have to learn all of that stuff and they could focus on coding. There seemed to be a time when Amiga demos were mostly exercises in weird ways to use copper lists and getting as many big sprites moving as possible, while ST demos were starting to go 3D and featured game like menus. The two machines inspired a different sort of creativity."

The Music Machine

We don't think there is much doubting that the ST's biggest legacy is in the music scene. The genius inclusion of the built in MIDI ports, and machine's low price led to a revolution in the UK music scene. Artists like Fatboy Slim, Jean Michel Jarre, 808 State, Utah Saints, and even Madonna, regularly used an Atari ST to help sequence their music. The ST probably made more appearances on *Top Of The Pops* in the late Eighties and early Nineties than anyone else. In fact, it was recently reported that on the Grammy award winning *Syro* by Aphex Twin (their first album in twelve years), an ST was used to produce several of the tracks, not bad for a thirty year old computer!

We tracked down Malte Pfaff-Brill, a musician experienced in using the ST, to find out how the ST got him into the music industry. "Well, a couple of friends of mine ran a recording studio in the north of Germany. We were mainly recording indie artists, and most of the stuff was using MIDI-driven



» Steinberg's Cubase was widely as one of the best music making packages on the market and is still going strong today on modern PCs.

» The ST's built-in MIDI ports were what made it the machine of choice for musicians everywhere.

» The ST was home to some of the very first home digitising packages. Here we can see the face of Jack Tramiel himself on the computer he created!

» Leading UK dance group 808 State were well known for their use of the Atari ST, here you can see one set up in their studio circa 1995.

"The built-in MIDI ports surely were a game changer for many creative people. It gave us musicians a very reliable tool that even worked perfectly in a live set-up" Malte Pfaff-Brill

gear. Basically, we threw together all the equipment we had, bought a pretty expensive mixing console (Yamaha 02R), a couple of ADAT machines, and a good microphone (Neumann U87), and started to record our own stuff, and later on, other artists, as it turned out that the two other guys were rather talented in mixing. I was working more as a songwriter and tester, but helped with producing other artists as well." But what was it that made the ST so good for making music? "Because it had such damn tight timing!" Malte offers up succinctly, before adding, "It was so much better than the alternatives that were available those days. The MIDI Ports being built into the ST from the very beginning made it easy for programmers to offer Software that supported steering your whole equipment with ease. Personally I loved Cubase on the ST. You had to look hard to find something that worked so nicely on other much more expensive machines, there was no need to buy any additional hardware either, you could just connect it up."

One of the artists Malte helped produce was JAW, who had a number of big hits in Germany and Europe such as the excellent single, *Survive*. We asked Malte how he thought the ST changed the music industry, "The built-in MIDI ports surely were a game changer for many creative people. It gave us musicians a very reliable tool that even worked perfectly in a live set-up. As Atari said, it really was 'power without the price.'" So why does Malte think the ST should be remembered? "From a personal point of view it was the machine that got me into making music. Also, it laid the foundation for my work today. If I hadn't had that machine, who knows if I would have ended up developing software at all. From a historical point of view, it certainly was a machine that outperformed many other systems that were much more expensive. It was a good hybrid between an entertainment system and a professional tool." If you want to hear some of Malte's more recent work then please check him out on Sound Cloud, just search for 'Pfaff-Brill'.

The Business Machine

When Jack Tramiel had his first vision of the Atari ST, he intended it to be a powerful business machine that would knock both the IBM PC and the Apple Mac out the ballpark. This was one of the main reasons the ST features a flicker free high-resolution mode (something the Amiga doesn't have) and it had an optional high-res monitor from the start. And when you look at it, Jack kind of succeeded in his ambitious vision: the ST has an impressive amount of high quality business software available for it, and when researching this article, we were quite surprised just how many people used the ST for serious applications.

First up is William Isbister, whose family owned a printing firm; the firm produced tickets, posters and flyers, mostly for the music industry. "If you came into our office you would have found three Mega STs and a 1040 STE," William fondly remembers. "The STs did the lot, we had them running Calamus for DTP, 1st Word plus for typing out letters, and various database programs and such for running the business. The ST was so simple and straight forward to use, you just turned it on and away you went, I even found time to play a few games!" ▶

PUBLISHERS THAT PUSHED THE ST

Purchase from the following and you'll be in safe hands

LORICIEL

■ The huge success of the ST in France led widespread support from French publishers and many ST-only games. Loriciel were perhaps the most impressive of all, though, constantly raising the bar with games such as *Bob Winner, Thunder Burner* and *Jim Power*.

THALION

■ Germany was another successful place for the ST and it was Thalion which lead the way, producing some of the most impressive games to be released on the ST. Titles of particular note include *No Second Prize, Wings Of Death* and *Trex Warrior*.

BITMAP BROTHERS

■ Although they are a developer more than a publisher, the brilliant brothers just have to be mentioned. With the ST as their lead development platform, they produced games like *Xenon*, *Speedball* and *Cadaver* that were no less impressive than the Amiga versions.

LOGOTRON

■ A company that is still going and they are best known for educational software, their brief flirtation into videogames produced impressive results. *StarRay* proved the ST could do parallax scrolling, and *Archipelagos* paved the way for polygons.

INFOGRAMES

■ Another French company, Infogrames is in fact now the owner of the Atari brand, so their legacy on the ST is somewhat fitting. They published over 70 games for the computer including superb titles like *North & South*, *Mystical* and *Captain Blood*.

» If there was one thing wrong with the Atari ST's design, it was putting the joystick and mouse ports on the underneath of the machine.

10 ST GAMES NOT ON THE AMIGA

SUPER SPRINT

■ Electronic Dreams' conversion of the hugely popular Atari arcade game *Super Sprint* is often named as the best multi-player experience on the machine. You can soon see why as this a very accomplished port that packs in all the overhead racing action of the original. Just pity the poor sod that always gets hunched over the keyboard though!

ROAD RUNNER

■ Many of US Gold's early arcade conversions didn't appear on the Amiga – titles such as *Gauntlet, Metro-Cross, Solomon's Key,* and this conversion of the Atari arcade game, *Road Runner.* You play as the speedy and titular Road Runner trying to escape the clutches of the cunning Wile E. Coyote with all the comedy of the original cartoon series.

WHERE TIME STOOD STILL

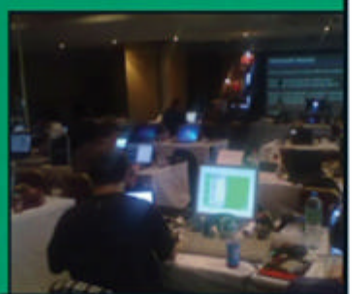
■ Denton Design's classic isometric adventure is probably more famous as one of the first 128k Spectrum games, but it also got a very smart ST version too. Interestingly they chose to keep the monochrome graphics for the 16-bit upgrade but with the extra shades of grey it gives the game the look of a classic black and white movie.

ENDURO RACER

■ A conversion of the excellent Sega coin-op, *Enduro Racer* is one of only a couple of titles that Activision didn't convert to the Amiga (the other is *Knightmare*). It is a very good conversion too, with its big sprites, solid frame-rate and some exceptional music by David Whittaker. It still ranks as the best home conversion of this classic game.

OIDS

■ One of the more famous ST system exclusives, this take on the Atari arcade game, *Gravitar,* is still regarded as one of the best ST games of all time, and rightly so in our opinion. *Oids* succeeded over similar games at the time such as *Thrust* and indeed, *Gravitar* itself. *Oids* focuses on arcade action over slower paced stratigical play and it benefits from it.

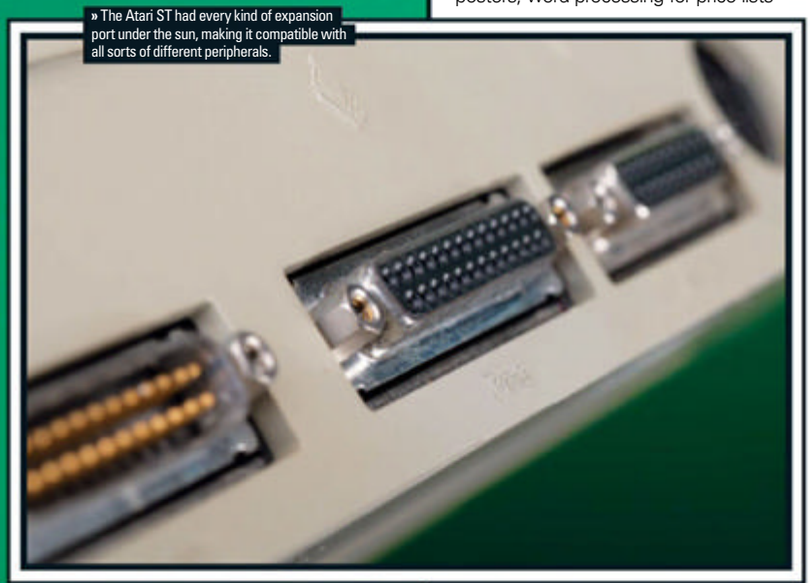


» Demo parties are still a very big thing across Europe where ST fans meet up and try to push the computer to new limits over the space of one weekend.

"The Power Pack was very popular with the publishers, there was a major demand from them to get their titles in it" Darryl Still

William was not alone in his use of the ST to run the whole show. Nick Harlow ran a successful computer shop specialising in Atari products that still exists today as the 16/32 Systems web store, "I used the ST for everything you can imagine," Nick recalls. "I had database software to manage my inventory, desktop publishing for posters, word processing for price lists and I even built my own applications using GFA BASIC. The ST was, and still is actually, a great computer that just did exactly what you wanted."

We also found some more unique uses for the ST, such as Steve Mitchell who used a ST to run his successful 'Play By Mail' game *Lore Lords Of Britain.* "I probably started coding on my first ST in 1987 and instantly fell in love with it," he remembers. "It took me about a year or so to get the first game and map up and running on it. Back then, getting the whole thing to run on a 4MB computer and storing several databases worth of data on a 60MB hard drive was pushing the limits. I started with only 512k Atari ST, and later got a HD as my files were too large for a floppy disk. I remember I had to hand solder a RAM upgrade onto the ST motherboard, it was a bit later before I upgraded to the Mega ST-4 which was the largest amount of internal RAM you could support on the ST system at the time. The Mega ST was a really nice computer, especially with the matching paper white monochrome monitors, which made it much easier on the eyes than using a green screen terminal like many PCs of the time. Looking back at it now, I really was pushing the edge of what was affordable in computing."



» The Atari ST had every kind of expansion port under the sun, making it compatible with all sorts of different peripherals.

» The biggest problem with ball mice was that they would gather lots of dirt, thankfully they were easy to clean.

The Demo Machine

One of the key reasons the ST is very much alive and well today and has such an enthusiastic audience is the demo scene. For those who perhaps don't really know what this is, or what it means then lets give you a little bit of history. Back in the day when we were arguing over which one was best, Amiga or ST, there were groups of people all over the world trying to prove it. They did this by creating demos: programs that featured effects that nobody imagined were possible on a 16-bit computer. The ST scene also liked to prove the capabilities of the computer by converting demos from the Amiga that took advantage of the machine's custom hardware and then doing them on a bare bones ST set-up. This led to the famous demo scene wars where legendary groups such as The Care Bears, The Replicants, The Blade Runners and The Lost Boys were worshiped by their fans. Many of these demo coders even went on to produce games for the ST and Amiga forming

Because the Atari ST had an early lead on the Amiga in terms of sales, it also got more support, meaning that there were many games released for the ST in these years that didn't get Amiga versions. Here are ten of the best…

RANARAMA

■ Hewson were also early adoptors to the ST and it completed several games that did not appear on the Amiga. The most famous of these has to be Steve Turner's excellent *Gauntlet* clone that features a human-turned-frog called Mervyn trying to fight his way through an array of dungeons so he could return to human form and avenge the death of his master.

STAR QUAKE

■ Stephen Crow's brilliant *Star Quake* was originally released in 1985 for a wide range of different 8-bit micro computers. The game was resurrected three years later in 1988 for the Atari ST and it's the best version of the lot. In this platform-based arcade adventure you play as BLOB, a robot like creature who must prevent a planet from exploding. No pressure then.

CHAMPIONSHIP WRESTLING

■ Epyx's sports games became a hallmark of quality during the mid to late Eighties. While titles like *Pitstop* and *World Championship Karate* (another ST exclusive) are better known, *Championship Wrestling* is one of the best. The isometric view works well as you pull off bone-crunching moves on your opponents.

SLAP FIGHT

■ Also known as Alcon, this is a conversion of the 1986 Toaplan/Taito arcade game of the same name. This is one of a few ST only games to be released by Ocean (this one was released under the Imagine label), it's a very highly regarded game among shoot-'em-up aficionados and it set the benchmark for many similar games that followed it.

TRANTOR: THE LAST STORM TROOPER

■ *Trantor* is often thought of as a coin-op conversion, but it was in fact an original game that was conceived by the team of Nick Bruty and David Perry at Probe Software. The gameplay is a mix of shooting and exploration with some huge, sprites. It is also noteworthy for being bloody hard, as Nick found out in issue 138.

companies such as Thalion, Eclipse and Caspian Software.

Fast-forward to the current day, and the demo scene is still very much alive and well. Demo parties still take place all over Europe with events like Outline, Sillyventure and Sundown drawing big numbers. One of the modern day heroes of the ST demo scene is Carsten 'Lsl Checkpoint' Koeckritz, who continues to set the bar for all other ST demos, and produces effects that other ST owners have only ever dreamed of. We were keen to ask him how he found his way into the crazy world of the ST demo scene. "I started cracking quite early when I got the ST and learned 68000 quite fast, but I was also very interested in demos from the start, he recalls."TCB, TEX, TLB, Delta Force, Level 16... they were the heroes of my youth they and still are. In 1996, 505 and me founded Checkpoint, with our first release at the Interjam party." But what, in his opinion, makes the ST demo scene so special? "Because we are cool as f**k! Seriously though, we live for dedication and the ST scene evolved quite a lot. The 'golden years' or however you call it, were cool and that, but personally the real ass-kicking stuff started to be released just after 1999, the Error In Line party comes to mind. What makes me quite sad is that most of the big groups vanished around 92/93. If you look at the old C64 groups – a lot of them are still together and quite active."

So one final word from Carsten, why does he think the ST should be remembered? "Like I said, Atari ST is cool as f**k! We know our own ways to do great stuff on a limited platform, starting with the original guys and continuing into the present day."

» The ST mouse had an iconic design that matched the lines and curves of the computer perfectly.

The Atari Machine

History tells us that all the gambles made back in 1985 by Jack Tramiel and his cash-strapped company worked out pretty well for Atari, and the ST became an almost overnight success. Early sales were brisk and the reception from the often overly critical media was very positive indeed. But the ST's real success came from Europe, the UK and France in particular, where it was very much positioned as a games machine. The man responsible for much of this fortune was European product manager Darryl Still. We asked him why he thought the ST flourished in these regions. "We had more localised territory focus I think," Darryl muses. We had the flexibility that the UK could do a different thing to Germany, but the US had to adopt a bigger strategy for the whole country and I think they struggled to get the right balance." Darryl was also the man behind the legendary ST Power Pack that was responsible for shifting more STs than anything else. This was a package of twenty of the most popular games for the ST that came bundled with every computer, offering fantastic value for money. So what was behind this idea? "The Power Pack was very popular with the publishers", remarks Darryl, "and there was a major demand from them to get their titles in it." But this clever idea was not without its downfalls and after a while it became clear that people were buying fewer games, as the 20 they got with the machine was keeping them more than happy. Darryl remembers this: "It was only when retail reported a drop on individual title sales and blamed it on the Power Pack that there was a shift in publisher attitude, which resulted in them giving more support to the Amiga."

So one of the reasons for the ST's success also became its downfall and we also asked Darryl what he thinks caused the Amiga to take over from the ST as the 16-bit computer of choice. "Publisher support," he summarises. "Whilst ST games were outselling Amiga games, the publishers were perfectly happy to just port the code across, and therefore not make use of any of the Amiga's superior graphical features. As soon as ST game's sales dropped off, due to the issues mentioned earlier, devs and publishers started making the Amiga their main platform and then porting "down" to the ST. So it became an ever-decreasing circle. Of course lack of success in the US didn't help, and that being the home country of the company, a lot of focus was used up over there."

So we give the final paragraph to Darryl on just why the man behind much of the ST's success thinks it should be remembered: "I would like to think that the ST in its own way was responsible for the quality we see with PC and Mac's now. Some of the innovation we now take for granted in our home computers and laptops come from those days and that machine." ★

Thanks to: Darryl Still, Carsten Koeckritz, Malte Pfaff-Brill, Glenn Corpes, William Isbister, Steve Mitchell and Nick Harlow.

Taking out the trash:

The story of Trashman

Darran Jones pulls on his overalls, grabs some heavy duty work gloves and quizzes Malcolm Evans about his popular Trashman games

If *Trashman* proves one thing, it's that videogame ideas can come from the most unlikely of places. For Malcolm Evans, the man behind *3D Monster Maze*, the conception of his new game came while he was visiting the porcelain throne. "Our advertising agent came out of the office after a meeting with my brother and asked what I was writing next," recalls Malcolm, who admits that he "had no idea". After being told by his agent that "all kids want today seems to be crap," he had a revelation.

We're too polite to enquire about the nature of Malcolm's bathroom visit, but he did give us insight into how he passes his spare time while awaiting nature's call. "I recalled a game called *Can Of Worms* from a Portsmouth-based company (where I was dragged up in the Fifties and Sixties), and wondered what it would be like in 3D," he begins. "I decided it would only raise a laugh, so I started thinking about clearing up rubbish. Though it lent itself to 3D it did not inspire me. However dustmen! Suddenly the ideas flowed and I left the crapper and set about the task."

That task resulted in *Trashman*, an extremely enjoyable game that revolved around… well it revolved around picking up rubbish. You take on the role of the titular *Trashman* with the aim of clearing up a number of progressively difficult streets (which are incidentally all real life locations around the Bath area). It's a simple idea for a game, but one that works well due to a number of clever mechanics that Malcolm added. More on that later, mind, as we were keen to discover if Malcolm had done any research whilst creating the game. "In my 40 years I had seen many dustmen and thought I knew their job," admits Malcolm "though I could never do the cartwheels one dustman did across our front lawn for the children."

If you have ever played any of Malcolm's earlier games you will discover that they are all rather inventive. Malcolm, of course, made his name with the rather excellent *3D Monster Maze* – an astonishing piece of programming that saw you trying to escape a 3D maze whilst being pursued by an angry T-Rex. It would be an incredible accomplishment on the Spectrum, but *3D Monster Maze* was actually on the ZX81. Needless to say, many of Malcolm's earlier Spectrum games again revolved around finding inventive ways to use the third dimension. Although *Trashman* may not look as outwardly impressive as some of Malcolm's other games, there's actually a lot of clever stuff going on. Aesthetically it's exceedingly well polished with a number of clever little effects and very little attribute clash. It's also fast, and while it's not as polished as Ultimate's early games, it still manages to deliver an extremely slick experience that remains highly entertaining to play today.

» [ZX Spectrum] Run out of time and you'll receive a warning, get two more and you're fired.

"I wanted to try something akin to 3D but I realised that with the more complex graphic interface of the Spectrum, and its lack of processing power, 3D (true or otherwise) was not possible," begins Malcolm when we quizzed him about *Trashman*'s rather distinctive look. "On the ZX81 the simple graphics made pseudo 3D possible – hence 3D on the ZX81 – and only limited success on the Spectrum. *Dustman* was an attempt to find an alternative where there is pseudo-forward movement with the sprites able to go behind things. The houses and other establishments are repeated, but reorganised in each street, the more difficult ones appearing in later levels and the roads getting longer." It's a lovely effect that really does make you feel like you're in a living world, more so when you're playing *Frogger* with the traffic or get chased around gardens by angry dogs. While the effect required a lot of work on Malcolm's part he relished the challenge. "Each of my games always presented a new problem," he tells us, "if they did not I would have lost interest. *Dustman* was the first time I used masks to hide characters behind objects."

> **"I had seen many dustmen and thought I knew their jobs, though I could never do the cartwheels one dustman did"**
> Malcolm Evans

***Trashman* may have looked rather lovely with its Spectrum-ised version of suburbia, but it also** delivered on the gameplay front too. All the Trashman has to do is traverse the street and pick up and empty every bin found there, before taking it back to its original resting place. Easy right? Being a busy fellow, Trashman is working against the clock, which will rapidly deplete if he strays off paths and steps on grass. Fortunately, it's possible to visit certain customers and help them out, which will restore time, hopefully allowing you to clear the street so you can move onto the next. Of course, while it sounds simple, *Trashman* is anything but, namely due to a number of factors, including that aforementioned dog, who will relentlessly pursue you. In fact it's rather similar to a mechanic seen in Jeff Minter's *Hover Bovver*...

"Like real life, being caught hurts," explains Malcolm about the addition of the angry canine. He's also refreshingly honest about the possible origins of the timer mechanic revealing, "at the time Jeff Minter's game didn't come to mind. Only later I realised there might have been an unconscious connection. It was just another impediment for the dustman, keeping him to the path."

Another stroke of genius in the game is the actual dustbin van you're repeatedly dumping your rubbish into. Malcolm is quite modest about the decision to have the van slowly move up the street, revealing "[it was] only to keep up the urgency of the game and to keep the dustman on the go." And yet it's a masterstroke and one of the best/worst things about *Trashman*, depending on how easily you panic. Whenever you see that van trundle up the street you instantly feel fear, realising that it's creating an even bigger distance between you and your next drop. It's a simple idea, but one that's perfectly executed and it's not the only nice touch

» [C64] In addition to chunkier visuals, the C64 version features motorbikes and plays *My Old Man's A Dustman*.

» [Amstrad CPC] Malcolm didn't work on the Amstrad and C64 conversions and isn't a fan of them.

That third game...

The Trashman game that isn't a Trashman game

Amazingly, an Amstrad version of *Trashman Goes Moonlighting* appeared online when an Italian poster called Darkgate uploaded it to the CPC Wiki forum. It was discovered on a backup tape with a German Amstrad, and it clearly states on the title screen that it is by New Generation Software. It's unclear how *Trashman Goes Moonlighting* came to be in its current state, but it's equally clear that it's not a game by Malcolm, as it exhibits none of his trademark flourishes. He's aware of the game's existence and we've shown him videos and images of it, but he's adamant that it's nothing to do with him and is therefore not a true *Trashman* game. "I had other games to write. Far more interesting [ones]," he tells us. "The game was never made," he told us back in issue 126, "so whatever the game is, it is not something produced by me."

Trashman Playing Tips

Make taking out the trash easy

PLAN

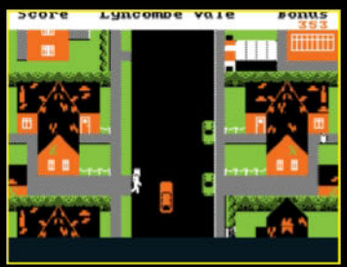
■ With two sides of the street to manage, and plenty of obstacles, it helps if you plan out your route mentally before committing to it. Work both sides of the street at once, as doing a single side will usually hurt you in the long run.

KEEP OFF THE GRASS!

■ Grass should be avoided at all costs. Your time will nosedive whenever you stray off the available paths and a few missteps can ruin an entire run. Pay careful attention to these houses and make sure you move carefully.

AVOID THE DUSTCART

■ It seems obvious but always approach the dustcart from the rear when you're carrying rubbish. If you're standing in front of it when it moves you'll be immediately killed, instantly ending the game.



PLAYING CHICKEN

■ The same can be said for traffic. It's completely unpredictable, meaning you really have to be aware of your surroundings whenever you cross the street. Cars get significantly quicker towards the end of a run.

USE MULTIPLE ROUTES

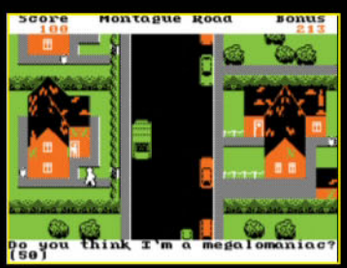
■ Whenever you can, try and pass a dustbin so you don't have to return to the same place. It's all too easy to accidentally continually pick up and drop a bin, which greatly impacts on your precious time.

WATCH THE TIME

■ Speaking of time, keep your eye on the timer. It seems that you have a lot of time to begin with, but it soon drains, particularly when you step on the grass or let the dustcart get too far away from you.

BE FRIENDLY

■ You should always make sure that you visit customers once you've dropped off their bins. Yes you'll waste a few seconds in the process, but the pay-off is an increase to your timer that becomes essential on later roads.



AVOID VERGES

■ Verges appear from street three onward and they are tempting to cross. Don't do it! You'll most likely lose more time than you would by going around them. Stick to the paths like a good Trashman.

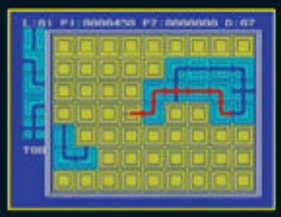
in *Trashman*. You'll move slightly slower when carrying bins, while cars move at various speeds, with a collision killing you and ending the game. The customers are also a great addition to the game, allowing you to slightly refill your timer meter, although it's a game mechanic that Malcolm had clearly forgotten about until we reminded him. "Did they, I can't remember such details?" he admits. "Assuming they did, that would have come to ensure it was worth Trashman going to get his tip and not just bugger off and move on as quickly as possible."

And those pithy exchanges, along with the grim headlines that appeared when the Trashman died, are a great example of the humour that runs throughout *Trashman*. It's a very British game, with nods to some of Malcolm's older works and the sort of dry humour that would later be prevalent in much of Rare's output. It gives *Trashman* a comic book feel and adds a level of surrealism that still makes it stand apart from many of its peers today. It's even possible for the Trashman to get drunk, which can make crossing the road even harder than it usually is. *Trashman* is filled to the brim with both ideas and humour, but interestingly, it proved to be a very organic process, with Malcolm revealing that he suffered few roadblocks while making the game.

"As I said before the ideas just flowed," he continues. "The constantly moving van, the dogs, the cyclists, the cars – it all added to the unexpected nature of the game. The controls were made as simple as possible; the picking up and depositing the bins were automatic." Malcolm also reveals to us that a causal passing comment led to focus on the timer that would end up giving Trashman much of its excitement. "On a *return* visit our advertising agent passed a comment saying it was sad that the onlooker could never get involved in a game," he continues. "Then it hit me. Dustman goes to get a tip and text comes up – the player has not ▶

Trash Collectors

Other videogames with a focus on waste



PIPE MANIA 1989

■ This inventive little puzzle game has you laying a continual supply of pipes so sewage wouldn't seep all over the floor. Each stage requires the sewage to run through a certain number of pipes before it can be finished, while later levels add a number of hazards to make life difficult for you.

EARTHWORM JIM 1994

■ Okay so this is tenuous, but the first level of *Earthworm Jim* is notable due to its garbage-based antagonist. Billy The Bin awaits you at the end of New Junk City and is a robot who can transform into a trashcan. Despite his menacing look, he's actually full of crap (ho ho) and relatively easy to beat.

TRASH PANIC 2009

■ This is an interesting twist on *Tetris* that has you dropping a predetermined amount of rubbish into a trashcan. Most items in the game are breakable, meaning you should aim to drop them onto other things to ensure you can fit everything into the can. A good puzzle let down by annoying difficulty spikes.

DUSTFORCE 2012

■ This fun little platformer from Hitbox Team features the same sort of twitch gameplay and precise controls found in the likes of *Super Meat Boy* and *N+*. The difference here however is that you're trying to clean up as much as possible and you leap and double jump your way to success.

RECYCLE: GARBAGE TRUCK SIMULATOR 2014

■ There is plenty to do in this waste management game, but it gets bland quickly. You can control dustbin men, use bulldozers to flatten garbage sites and even create rubbish tips, but it's never fun to play, feeling too much like actual work.

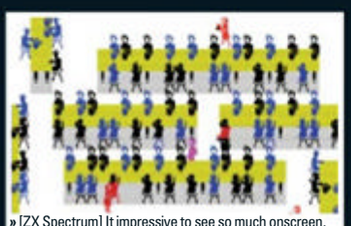
▶ got time to read it. It is only the onlooker who has time. If the player is distracted it impedes his progress. It also gave me the opportunity of getting the dustman drunk in the pub and out of full control, though he can go behind a wall and be sick and recover remarkably quickly."

You'll notice that at several points of this interview, Malcolm has referred to his game as *Dustman*. Worry not readers for he isn't suffering from memory loss, but is just recalling the game's original moniker. "Up to about four weeks before finishing the game it was to be called *Dustman*," he reveals, "then we discovered there was already a game called *Dustman*. It was about picking up rubbish in space, though I never saw the game. We therefore changed the name to *Trashman*, thinking it might appeal to the American market if we were to promote it there. In fact when Quicksilver did market it there for us they had to change it to *Garbage Gobbler* since the Americans did not know what a trashman was.

The success of *Trashman* on the Spectrum led to other conversions of the game, with ports appearing on both the Amstrad and Commodore 64. While they're both decent offerings, they lack the speed of the original game and the graphics on both are nowhere near as striking as those found on the Spectrum. Malcolm isn't a fan and didn't work on the conversions either. "Amstrad approached us wanting to do a version for their new computer but even a cursory look at the Amstrad's operating system was sufficient to show it would be difficult and I did not have time to do a conversion," explains Malcolm. "We gave them the code, flow charts and graphics and I went and described its structure to their programmers and outlined what I saw as the main problems of conversion. Months later they gave up. My brother then passed the conversion over to another company who struggled but got something working. To be honest I did not like either conversions [as] they lacked urgency. The graphics felt wrong and the speed stilted at times. But we had to publish then to recoup our costs."

» [ZX Spectrum] You can go anywhere you like in *Travel With Trashman*, providing you have enough cash…

Malcolm might not have been happy with *Trashman*, but gamers were certainly pleased with his game, and *Trashman* did well in Spectrum magazines, picking up 8/10s in everything from *Crash* and *Computer + Video Games*, to *Sinclair User* and *Personal Computer Games*. Needless to say, *Trashman*'s success meant that a sequel was inevitable, but it wasn't the sequel that many fans expected…



» [ZX Spectrum] It impressive to see so much onscreen, but the downside is it's hard to work out what's going on.

Travel With Trashman took the rubbish collecting theme of the original game but transported it overseas, with Trashman travelling to different places to work. Collecting beer glasses in Munich, picking up frogs in Paris, retrieving tissues from the Wailing Wall and grabbing roses from the bull ring in Madrid are just a few of Trashman's tasks and they continue in this theme across 13 locations. Trashman has a certain amount of money at the start of the game that he can use to buy tickets. As with *Trashman*, dawdling on a task causes the money to decrease and it drops quicker if you come into contact with the various antagonists, from French waiters to an angry bull. Run out of money or get killed by the bull and it is game over.

"I wrote software for purely selfish reasons – to solve problems," begins Malcolm when we ask him why the sequel is so different. "It is what kept my interest. A virtual copy of the original would not have sustained my interest though it might have kept the company afloat a bit longer. So *Travel* not only continued to tackle the problems of the first, but added that each location used different movement algorithms more akin to the objects that were moving. So even though Trashman had to clean up what he had to avoid was more complex in their movement."

Another complexity of *Travel With Trashman* is the sheer amount of information on many of the screens. While levels like Madrid are relatively straightforward, some stages are jammed with objects, which can make it quite hard to work out what's going on. As with *Trashman*

» [ZX Spectrum] This angry bull is found in Madrid. If he hits you, he'll immediately kill you.

it's possible to walk in front of and behind things, giving a nice pleasing sense of depth to proceedings. Sadly, the decision to make him the same colour as his numerous protagonists can sometimes make it hard to pick him out. Despite this, Malcolm recalls no real issues with creating the game's look, admitting the entire process was quite easy. "It was all done using time slot sharing and trying to maintain smooth movement yet flicker free," he explains. "I always synchronized the program to the screen frame-rate. Not many programmers did that then. I don't think there was ever a level where the number of moving sprites reached the maximum. I don't think *TWT* pushed Spectrum any more than any other of my games. They were all trying to explore techniques to achieve what I had not done before. I was always conscious of the limitations of the Spectrum and ZX81, and trying to reach that limit, by using some special aspect of the machine to my advantage like in *Knot In 3D* or the full screen *Breakout* for the 1K ZX81."

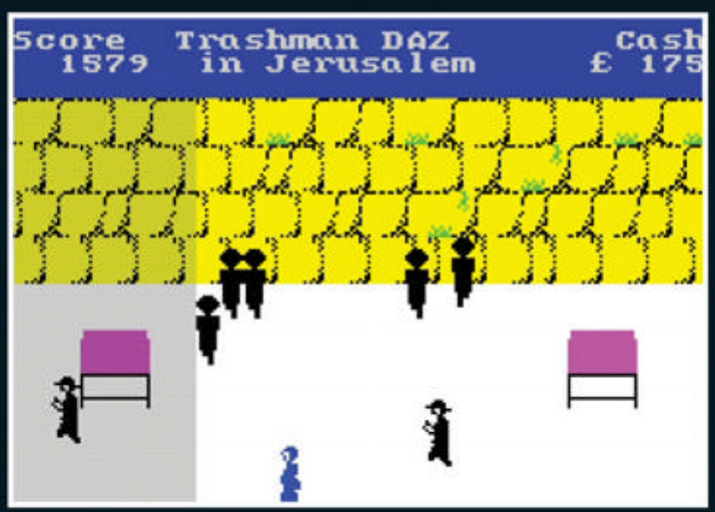
Despite the globetrotting theme of *Travel With Trashman*, it wasn't a case of Malcolm simply recalling his own personal experiences of holidays past, instead he received inspiration for his thematic adventure from another source entirely. "At the time I wrote it I don't think I had been abroad at all," he admits, "except on business. It is only now I am retired that I have had the opportunity to globetrot. All the locations came from a children's encyclopedia, inspired by its illustrations in some cases, but all idealized to the basic symbols to identify the location."

Although *Travel With Trashman* offered plenty of variety over the original game, it ultimately felt less focused than the original and was certainly a lot harder, due to the unpredictable nature of your opponents, which meant you could be quickly robbed of money. Scores were not as kind to *Travel With Trashman*, with a few even pointing out the offensive nature of some of the 'amusing comments' that appear during play (we can imagine the *Daily Mail* having a field day with it if *Travel With Trashman* was released today). Malcolm remains pleased with the final game, despite it not reaching the acclaim or sales of *Trashman*, but does admit he'd be tempted to make adjustments to it if revisiting it today. "At the time I was happy with it. I am not sure what I am unhappy about now. I would put more levels into it. I don't feel that the different algorithms made that much different to the gameplay."

This wouldn't be a *Trashman* feature if we didn't at least explore the rumoured third game that never arrived. Frustratingly, when we quizzed Malcolm about its gameplay, graphical style he simply told us "I haven't a clue". Digging a little deeper, we discovered the reason for Malcolm's forgetfulness – there wasn't a game in the first place. "At the launch of *Travel With Trashman* (which I didn't attend), a question was asked was there going to be another sequel for *Trashman*," explains Malcolm, "my brother's ever hopeful reply was yes. He later clarified this by giving it a name, *Trashman Goes Moonlighting*. I had no intention of doing yet another *Trashman* game."

Trashman Goes Moonlighting may have been nothing more than wishing thinking (see box out), but the first two games still live on in the hearts of 8-bit gamers, particularly the original *Trashman*, which still holds up incredibly well today – a fact which surprises Malcolm. "It astounds me that the games are still popular," he admits. "If we had known that, we would not have sold the rights to all my games to Virgin. I think it is for your readers to answer that question. But I hope they have gained as much enjoyment from them as I did writing them." ★

"A question was asked was there going to be another sequel. My brother's hopeful reply was yes"
Malcolm Evans



» [ZX Spectrum] Who would've thought that there were lots of hankies to pick up at the Wailing Wall?

» [ZX Spectrum] Can you spot Trashman in this picture? It's like *Where's Wally.*

Trashman Accolades

What the gaming press were saying about Malcolm's game

CRASH ISSUE 4

■ "Marvellous value for money, I must say. I don't know how addictive it will be in the long term, but I shall carry on playing to find out"

83%

SINCLAIR USER ISSUE 27

■ "It is a tough life working on the bins in the excellent *Trashman* from New Generation." 8/10

8/10

BIG K ISSUE 7

■ *Trashman is* the most resplendent offering yet from the Evans pen. It's real state of the art landscaping."

3Ks

YOUR SPECTRUM ISSUE 6

■ "It's totally original and the idea is brilliant – definitely one of this year's best programs."

Hit

PERSONAL COMPUTER GAMES ISSUE 7

■ "*Trashman* is an entirely original game with great graphics and some very amusing touches."

8/10

STRATEG SIMULAT

As the rise of personal computers began in earnest, Joel Billings saw an opportunity to modernise his hobby, wargaming. The result was SSI, one of the biggest names in early strategy games and a company that, as Adam Barnes learns, was an important precursor to the videogames industry

There's a truth to a large number of early videogame designs in that the majority owe a great deal to the board games that preceded them. While the likes of *Monopoly* may well have kept families entertained on the weekends, it was the grand and often complex simulation board games that had been such a heavy part of early programmers' lives. At a time when computing was a burgeoning industry it's perhaps not surprising to hear that many early programmers had been inspired by the myriad of strategic board games that covered a wide range of scenarios: everything from commanding battalions of tanks, to naval warfare, and even the troops on the ground. Mainframe computers saw programmers attempting their own recreations of their favourite wargames – and the electronic gaming scene soon grew out of that. Joel Billings, having just graduated from college, saw the potential of home computers as a new, modern alternative to the board games he had spent his childhood playing – and believed there could be a market for it.

"It was summer of 1979," Joel tells us of his early career, "and I happened to be out with my girlfriend's father who was an IBM programmer. I had just got out of college and I happened to mention that I was interested in wargames, and I saw a personal computer and I said I thought it would be really good if these wargames got onto computers. He told me that he had a friend, a programmer, who was a gamer

IC IONS INC

» [Apple II] *Computer Bismarck* offered a glimpse at what could be possible for wargames on the computer, but it's professional packaging is what truly made it stand out.

» [Apple II] Many of SSI's earliest games were designed around existing concepts from board games. This stopped soon after regular legal action was threatened.

who said the same things, so I contacted him and we started talking and pretty much over that summer, between college, graduation and going to business school. I got the idea to start SSI so I just went ahead and did it." Though the world had seen the rise of coin-ops through the likes of *Computer Space* and *Pong*, there was yet to be a precedent for a commercial videogames market – at least as we now know it. All the same, that wasn't something Joel was interested in seeing, he had envisioned the possibilities that computers could enable board wargames to enter a whole new era. After setting up Strategic Simulations Inc in August 1979 he and a couple of programmers would set about creating *Computer Bismarck*, a simple, electronic equivalent of a wargame based upon the sinking of the German World War II ship, the Bismarck. They chose this for a very particular reason: it was a hunt and chase situation, so the AI wouldn't require too much development, and the computer could handle the fog of war in a way that a board game simply couldn't. "You had to call out sea zones," says Joel of the board game version of the *Bismarck*, "and the act of just doing that let the other player (the German player) know where you were searching." Computers could avoid all that, providing a system that would enable an unbiased recreation of the same sorts of systems used in the board games.

"Everything was new," says Joel about the very early videogames industry. "I saw my first personal computer in May right before I graduated – and that was the TRS-80. I was lucky that it was a small ▶

THE BIRTH OF RTS

How SSI defined a genre

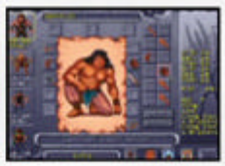
Though real-time strategy is often considered to be something more akin to *Warcraft* and *Total Annihilation*, it is said the SSI were responsible – if admittedly indirectly – for some of the first RTS games. Dan Bunten (who later became Danielle Bunten) published Cytron Masters in 1982 through SSI, a game that was then advertised as being "so fast you'll call it a strategy *arcade* game." As something of a novelty back then, this was a strategy game that allowed your troops to enact on orders you gave them the instant you gave them, without having to wait. This was then followed up by *Combat Leader* in 1983 before Dan went to work on *M.U.L.E* with Electronic Arts.

IN THE KNOW

- SSI's first game, *Computer Bismarck*, was also the first ever commercial electronic wargame.
- All of SSI's early games were written in BASIC, since that was the programming language Joel had learnt at college.
- Famed developer Danielle Bunten Berry caught the attention of EA and after her early games published through SSI, thereby enabling a large portion of her success.
- EA CEO Trip Hawkins, then marketing manager for Apple, persuaded SSI to develop for the Apple II. In its lifetime SSI produced 68 games for the Apple II, among other platforms.
- 1983's *Queen Of Hearts*, a pinball game, was SSI's worst seller, but it was published as a reward for one of SSI's long-time company developers who had always wanted to make a pinball game.
- SSI beat out ten other companies for the rights of *Dungeons & Dragons* from TSR, including Electronic Arts, Sierra Online and Origin Systems.
- In its first eight years, SSI had developed or published a remarkable total of 89 different games across a range of wargames, RPGs and even real-time strategy games.

THE DNA OF STRATEGIC SIMULATIONS INC

Wargames
Even until the very end SSI was producing electronic wargames. Though it was always a fairly niche market, it was consistent, and gave the company an identity during its formative years that helped maintain its success.



Licences
Though of a lot of the company's success came from its unlicensed games, it wasn't until it began working on the *D&D* licence that the company began to boom – many recognise the name SSI thanks to its work on licences.

Gold Box
It's with this term that many gamers use to refer to as the 'Golden Age of RPGs', and was SSI's brand that it associated with its string of *D&D* RPGs, regardless of setting. The popular *Gold Box* Engine was used to power these games.

History
As a by-product of working on so many wargames, SSI became wknown for it's approach to historical battles, with titles set in World War II, a number in the Napoleonic Wars and a more still at sea with the *Naval Battles* series.

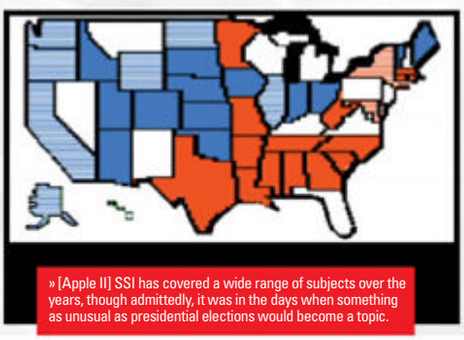
DIY Wargames
SSI released a handful of games that allowed players to create and design their own digital wargames. The *Wargame Construction Set* only released three titles in the series, but it empowered players to create their own.

world and I was in Silicon Valley, and when I started talking to venture capital people they knew Trip Hawkins at Apple Computers. He was a marketing manager there. So I met Trip through the venture capitals, and Trip convinced me that the Apple II was the product I should be making games for." Joel remembers how limited access to a computer really was; these were expensive machines that were really only available to enthusiasts with a bit of money. "I was working at a mainframe computer company called Amdahl and I even had to find the homebrew computer club at the company to find people who had access to computers." Computer Bismarck took only a few months to develop, beginning in August 1979 and eventually releasing in January 1980 for the Apple II, alongside the TRS-80 a short while later.

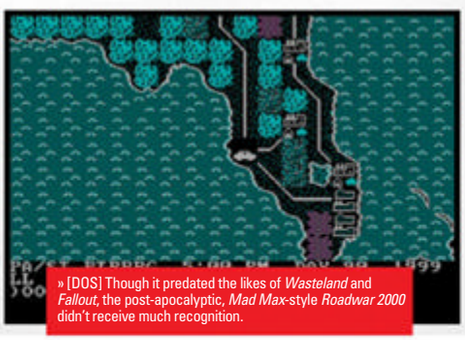
> **"RPGS were clearly more mass-market than the historical wargames"**
> JOEL BILLINGS

At this point the concept of a commercial games industry was newborn. Home computers were a luxury, and any games you could buy for it were homemade programs, written in bedrooms and sold on floppy discs inside zip-locked bags in local computing stores. Having thrived on a culture of board games, however, gave Joel a unique mindset – he didn't see *Computer Bismarck* as a videogame, but instead an electronic wargame. The game was sold with a box decorated with custom artwork, which contained a manual and even a map – the sorts of things that wargamers would have appreciated. "That was not because I was brilliant," claims Joel, "it was because I always bought Avalon Hill board games and they came in boxes. So it just seemed like 'well, of course', if you're going to buy a game it comes in a box and you had the manual and the map charts." All the same, Joel admits that "helped us a lot", since on the shelf next to this plastic bags with floppy discs was a professionally produced box. "We also charged a really high price at the time; I think most things were like $15-25 , and we took the other approach and said 'no, it's got to be a high price' so we charged $60 for it. A board game at the time probably cost $30, but my uncle helped me a lot on this. He said, 'look, you're dealing with a niche market, you're only going to sell so many of them. And how much did they have to pay to get the computer to play this thing? Okay, they had to buy a $2,000 computer, so they've probably got access to some money.'" The first advert for Computer Bismarck claimed it to be a $2160 wargame; $2100 for the Apple II computer, and $60 for the game to play on it. "And people did (I'm not sure how many) actually go out and buy the computer so they could start playing the games."

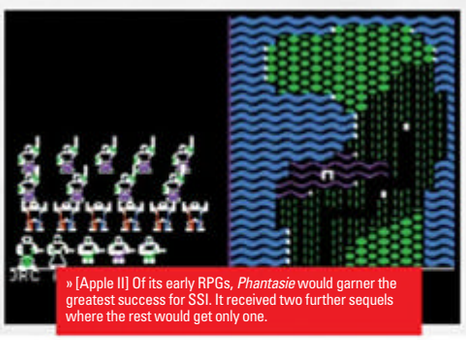
That professional packaging indirectly led to a change for the company, however. Shortly after the release of *Computer Bismarck*, famed game designer Dan Bunten got in touch with SSI. "He had designed this football game and he sent it to us because we had put out *Bismarck* and it had looked like we knew what we were doing – again, we had the box and it looked good. We thought it was great, this is fantastic and said 'sure, we'll publish it'. We had another person send in an air combat game, and he ultimately did *Computer Baseball*. So



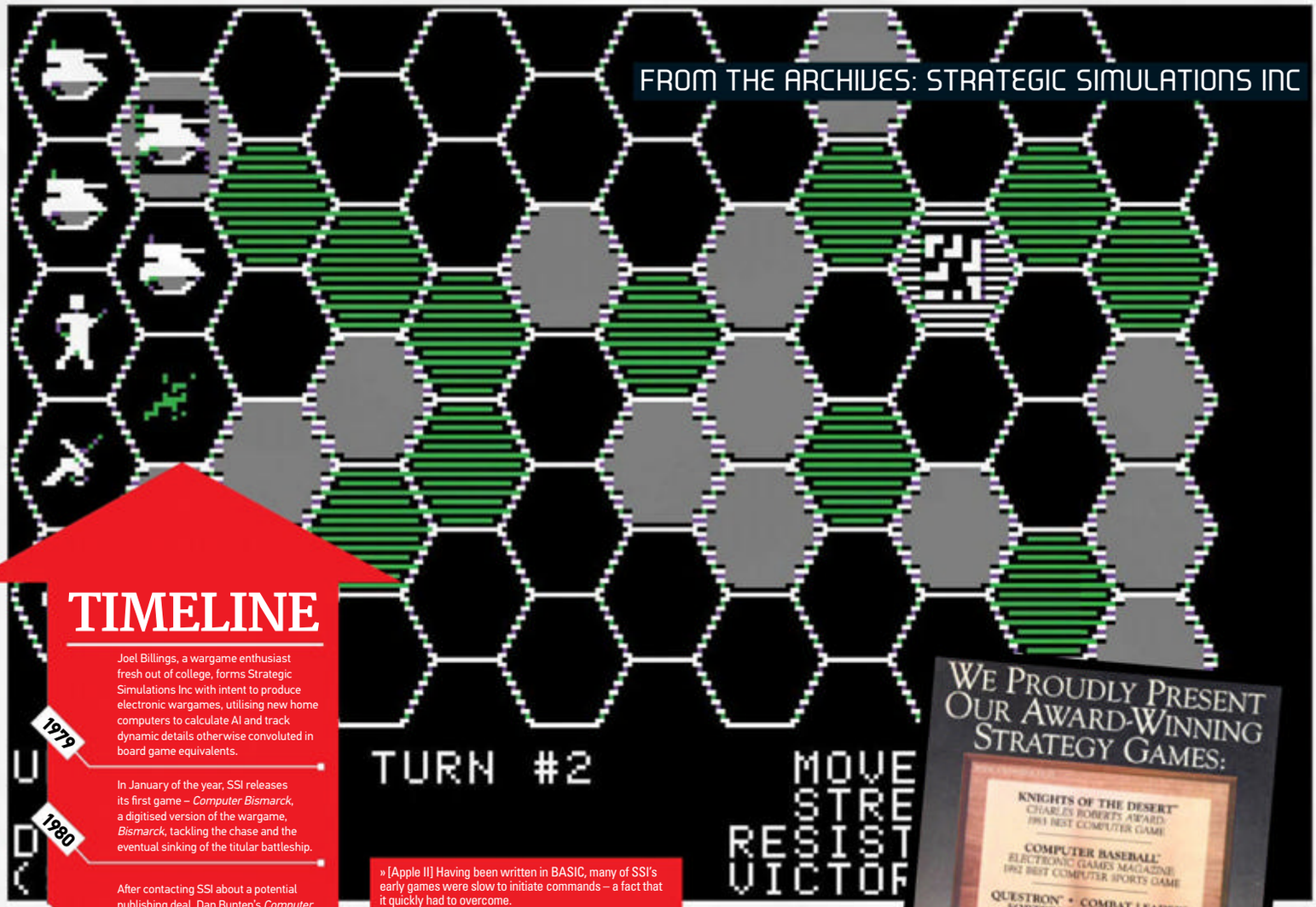
» [Apple II] SSI has covered a wide range of subjects over the years, though admittedly, it was in the days when something as unusual as presidential elections would become a topic.



» [DOS] Though it predated the likes of *Wasteland* and *Fallout*, the post-apocalyptic, *Mad Max*-style *Roadwar 2000* didn't receive much recognition.



» [Apple II] Of its early RPGs, *Phantasie* would garner the greatest success for SSI. It received two further sequels where the rest would get only one.



» [Apple II] Having been written in BASIC, many of SSI's early games were slow to initiate commands – a fact that it quickly had to overcome.

TIMELINE

1979 Joel Billings, a wargame enthusiast fresh out of college, forms Strategic Simulations Inc with intent to produce electronic wargames, utilising new home computers to calculate AI and track dynamic details otherwise convoluted in board game equivalents.

1980 In January of the year, SSI releases its first game – *Computer Bismarck*, a digitised version of the wargame, *Bismarck*, tackling the chase and the eventual sinking of the titular battleship.

1980 After contacting SSI about a potential publishing deal, Dan Bunten's *Computer Quarterback* is reproduced with extra features and republished by SSI, starting the company's interest in publishing.

1982 SSI launches its first *RapidFire* brand, intended to denote games published by the company rather than developed internally. The branding only survives a handful of titles.

1984 *Questron* is published, marking it the first entry into the fantasy RPG genre for SSI. It is well received, with further interest to create an RPG from employees internally.

1987 SSI successfully earns the rights to *Dungeons & Dragons*, beating out bigger companies like Electronic Arts, Sierra Online and Origin Systems. The result would be a period of huge growth for the company.

1993 Prolonged development times lead to financial troubles, forcing SSI to have its first layoff – letting go around 30 or 40 members of staff from the company.

1994 *Panzer General*, a simple and accessible wargame, which featured various WWII campaigns, is released, proving to be a huge success for SSI, and its most successful wargame title to date.

1994 Despite the success of *Panzer General*, SSI continued to look for a buyer – missing out from a buyout by EA – and is finally sold to Mindscape, all but acting as the demise of SSI.

2001 Having since achieved limited success under Mindscape and many of its key developers leaving, SSI is finally bought out by Ubisoft which later retired the brand.

what happened was that our entire business plan got thrown out of the window."

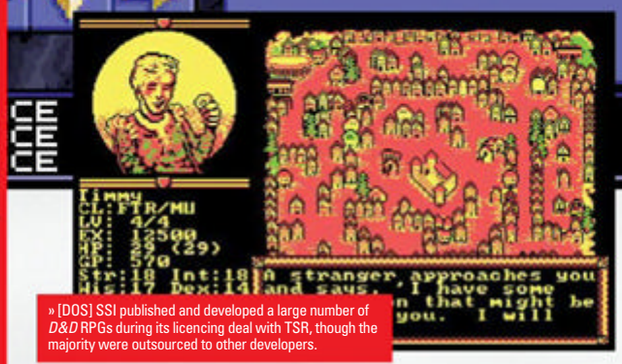
Where SSI had intended to be more like SPI – a board game designer whose products were almost entirely developed in-house – it ended up becoming Avalon Hill, the big name in board games who published other people's work. SSI set about publishing almost everything that was sent in, providing it was of some interest. With Joel's history of wargaming, strategy and simulation naturally became the company's flavour. By the end of 1980, SSI was already profitable, having then published *Computer Ambush*, *Computer Quarterback* and *Computer Conflict* – games covering snipers, American football and World War II battles respectively. The progression from there was quick, in 1981 the company released eight more titles, five in 1982 and *eighteen* more in 1983. By the late Eighties SSI had made a name for itself as *the* strategy game developer of the era after having covered countless WWII battles, space warfare and tank commanders, baseball and simulations in elections, economics and even epidemics.

During this period of growth SSI launched its *RapidFire* brand, a line of games that were published through third-party developers rather than created internally. The branding only lasted for a handful of titles, however, and was discarded by 1984. But in looking at every opportunity it was sent, SSI would stumble on an important shift in the company.

Questron, the company's first RPG, was submitted to SSI, and though Joel had not been much of a fantasy role-playing gamer there were many at the company who were. Their interest in *Questron* allowed the game to be published, followed a year later by *Phantasie* and the internally developed *Wizard's Crown*. Joel admits that it was at this point SSI, which had around 30-40 employees, really started to take off: "To me it was all the same because my friends when I was growing up playing board games, some of them played *D&D* so there was some real interconnections – so it was just natural that we would start doing role-playing games. And that's where the company started getting bigger, because the RPGs were clearly more mass-market than the historical wargames."

Though SSI's output up until that point had largely been iterative, it was only with the success of RPGs that the company began to create sequels. Where many of its wargames would be released with the same rules as its predecessor only under different scenarios, RPGs allowed SSI to began experimenting with brands much more heartily. *Phantasie* had its follow up, released in 1986; a *Wizard's Crown* sequel, named *The Eternal Dagger,* the year after that; and ▶

» [Apple II] Before it made its name with *Command & Conquer*, Westwood Studios worked for SSI in creating some of the best *D&D* RPGs to date.



» [DOS] SSI published and developed a large number of *D&D* RPGs during its licencing deal with TSR, though the majority were outsourced to other developers.

WHERE ARE THEY NOW?

Joel Billings

Joel is still living out his love of creating wargames at 2by3 Games, a development studio he helped co-found alongside other famed SSI staff members. He has a much more hands-on approach to development than he did at SSI – where the company's growth meant his time was increasingly spent on the business side of things rather than the design and development of the games the company sold.

Chuck Kroegel

After joining early in SSI's life in 1983, Chuck helped program many of the company's output, later becoming in charge of product development. Chuck is now CEO of Petroglyph Games, a 12 year old company that he helped to form after EA closed Westwood Studios. The company has continued with its strategy game heritage, with a big focus on real-time strategy. Its latest release was *Grey Goo* in January 2015 for PC.

Keith Brors

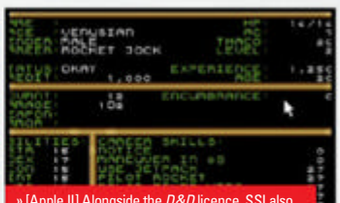
Though Keith's input into SSI was immeasurable – he created wargame engines, researched and developed new ideas and eventually became Techincal Director – it was his interest in fantasy RPGs that led to the publishing and development of SSI's early RPGs. These days Keith works alongside Joel at 2by3 Games developing strategy games that befit the man's experience and knowledge.

finally came a sequel to *Questron* in 1988. But this year had a much more momentous opportunity for SSI – at least when it came to its role-playing games. "Our sales guy had gone to Gen Con, which is the big convention that TSR put on every year, and they said they were going to be looking to sell the rights [to *D&D*] and work with somebody to do computer games. So we pitched to them – a bunch of us made a presentation to TSR in 1987 – and one of the things that we had to show was that *Wizard's Crown* was a tactical combat game inside a role-playing game. It was like a miniatures combat game, and that was because Keith [Brors] and Paul [Murray] had played those games that were like that such as *D&D*."

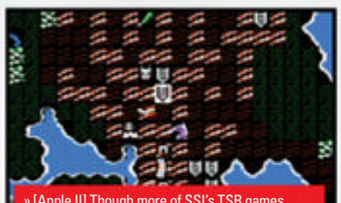
Joel admits that it was because of those early RPGs that the SSI managed to get those rights, and with SSI up against big names like Electronic Arts and Origin Systems it needed all the help it could get. The pitch succeeded, however, with SSI offering not only its abilities as a developer but its wide distribution network, and its vision for what it could achieve with the franchise. "It was huge," says Joel. "We got a five year licence with two years of extensions."

But despite the highs that came with the news, however, it sadly also heralded in what would ultimately end up as the demise of SSI. This was still a relatively small company, and to achieve the demands of TSR it would need better distribution and bigger finances. "At that point we went to Electronic Arts and we signed up to be an affiliate label, that was the big business deal. So they paid to buy twenty per cent interest in SSI, and we agreed to become an affiliated label and distributed our products through EA. There were pluses and minuses to that deal, and if you go back and look at it you could say that sort of sealed the fate of SSI in some ways." But before all that came the task of creating the products it had promised to TSR, and the first game *Pool Of Radiance* was released in 1988 only a year after the deal was made.

That was the first of many *D&D* games, however, with SSI releasing a large number of titles across its seven year licensing deal, all part of its *Gold Box* brand. *Pool Of Radiance* was followed by three other Gold Box titles, each a year apart: *Curse Of The Azure Bonds*, *Secret Of The Silver Blades*, and then finally, *Pools Of Darkness* in 1991. With the combination of the *D&D* licence and EA's greater distributing capabilities, SSI's *Gold Box* RPGs became a booming success – an era of intense growth followed. It continued its wargames alongside the RPGs, but all the while the company wanted to buy back out of the EA deal. Yet as SSI grew so, too, did its stock value, increasing the cost it would need to pay for shares back from EA. To make matters worse SSI



» [Apple II] Alongside the *D&D* licence, SSI also acquired the rights to recreations of TSR's *Buck Rogers* games, too.



» [Apple II] Though more of SSI's TSR games would be based in the *Forgotten Realms* campaign, it spent a great deal of time with *Dragonlance* too.

» [DOS] The development of *Dark Sun: Shattered Lands* almost crippled SSI, made worse by the poorer reception for the game.

DEFINING GAMES

Computer Bismarck 1980
The first game for any big company is often one of the most important. In the case of *Computer Bismarck* it stood as testament to the capabilities of home computers – which, at the time, was still a burgeoning computer games scene, but not an integral part of it – and the ways in which they could enable a whole new breed of wargames.

Questron 1984
Though it was a concept originally developed externally, *Questron* was sent into SSI whose internal pen-and-paper RPG fanatics had deemed a great title. The company agreed to publish it and achieved a modicum of greater success than its numerous wargames and strategy titles had done previously, spurring SSI into attempting its own fantasy RPG.

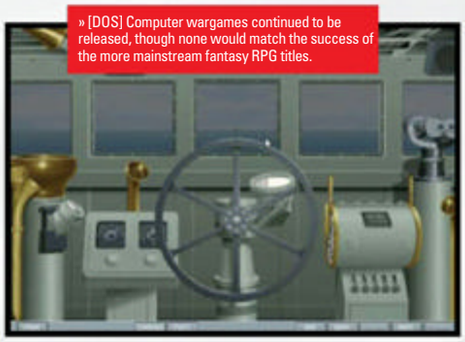
Wizard's Crown 1985
Internally developed RPGs *Phantasie* and *Wizard's Crown* both played a large part in the game's future later down the line, but of the two *Wizard's Crown* became the title that would award the company the *D&D* licence. It used a similar system to that of *Questron*, and was later later followed by a sequel, though this range of RPGs all used familiar systems.

Pool Of Radiance 1988
This was the first of the four-part *Gold Box* series of fantasy RPGs built on TSR's *Dungeons & Dragons* ruleset, set in the popular *Forgotten Realms* campaign. SSI would later hire the likes of Westwood Studios, Stormfront and DreamForge to work on its *D&D*, making this set of RPGs all the more important. They each used the same *Gold Box* engine.

Panzer General 1994
As the last great success for the company, *Panzer General* holds particular significance for the developer. However, its simple to understand mechanics, alongside realistic data meant that it was a wargame that was more accessible to a wider group of players, and still maintains a community of fans and modders to this day.

was still having to pay its cut towards EA, reducing its profitability in spite of the greater success the developer was experiencing.

SSI reached out to Stormfront Studios to help continue its *Forgotten Realms* brand of *Gold Box* games, while it continued with *Dragonlance* and, later, *Dark Sun*. Across fourteen titles the *Gold Box* engine had proven to be a success, but as the company continued to work towards upgrading the engine with TSR's maligned *Dark Sun* campaign setting, it began to struggle. "We had three big projects going on: *Dark Sun*, a sci-fi game on the *Gold Box* engine and a *Dark Sun* Nintendo game. We all expected the *Dark Sun* game to take a year, because that was what the others had taken, but it ended up taking two. And that nearly killed the company, just having double the development costs was terrible. So we ended up deciding to fold all these projects and just focus on the *Dark Sun* game, and we had our first layoff."



» [DOS] Computer wargames continued to be released, though none would match the success of the more mainstream fantasy RPG titles.

» [DOS] Though it wasn't the last game that SSI released, *Panzer General* was the last success before the Mindscape era truly began.

> **"We agreed to become an affiliated label and distributed through EA"**
> JOEL BILLINGS

This took the company – that, at it's height, had about 120 employees in 1992 – back down to a more manageable 75 in 1993. *Dark Sun* failed to appeal in quite the same way that *Forgotten Realms* and *Dragonlance* had to *D&D* fans, which had a knock on effect for the sales of *Dark Sun*, meaning the extended development time had became a much greater problem. Despite its poor reception, *Dark Sun* was complete, but for SSI, the writing was on the wall and the company was not as strong as it once was.

"The industry was getting to the point where it was getting to be more hit-driven and the costs of development had gone up. We had sort of been shielded from that for a long time because we'd been doing these niche products, but when we were doing these *D&D* projects we were suddenly playing with the big dogs. We weren't a company like Electronic Arts who had millions and millions of dollars of venture capital behind them, and so we were suddenly betting the company on these million dollar development deals. If one bet went wrong that could be all the capital of the company, basically."

It was clear that SSI needed to be sold. The funding it was needing for the projects had escalated, and so it approached EA for the buyout. Yet happenstance was against the company: as the deal was proposed to the board, Trip Hawkins – friend of Joel Billings and now CEO of Electronic Arts – was not available to pitch it to the board after having been called away for his child's birth. Ultimately, the deal did not pass, and SSI was left worried about their future once more.

In the meantime SSI moved the company away from its TSR products, instead reallocating staff from its cancelled projects alongside *Dark Sun* onto smaller, smarter wargames – reviving a phoenix form the ashes of sorts for the company. The result was *Panzer General*, the last big product for SSI that simplified the wargame genre to make it accessible for a wider community. It was a huge success, flying off the shelves and standing out as the company's most popular wargame to date. At that point, however, the damage had been done, and a deal was needed. Mindscape eventually bought out SSI, but brought with it a whole new host of problems. The offices were eventually moved away from its original Sunny Dale, California, location and the industry had become more reliant on blockbuster hits than ever before, and Mindscape itself ended up struggling financially. It was a series of quiet unfortunates that eventually led to the company being absorbed into Ubisoft, with very little mention of it since 2001.

It's a sombre way of ending the story of such a revered electronic wargames developer. It's essentially the retelling of an industry that began life with enthusiastic programmers, doing what they can to break ground by recreating their favourite board games on mainframe computers, only to quickly outgrow itself as computer gaming became a more popular means of solace the world over. All the same, while SSI's ending is unfairly more fizz than a shell-shocking bang, it's good to remember that – as is often the case – those that burn brightest, burn the quickest.

TOP 25 SPORTS GAMES

retro GAMER READERS' CHOICE

START WARMING UP AND GET YOUR GAME FACE ON AS NICK THORPE IS ABOUT TO RUN DOWN RETRO GAMER READERS' TOP 25 SPORTS GAMES

25 Emlyn Hughes International Soccer

DEVELOPER: Audiogenic Software
YEAR: 1988 **FORMATS:** Various

It wasn't just a strong licence that sold this football classic – *Emlyn Hughes International Soccer* offered a decent range of options, including three shooting methods and management features. The graphics were never astounding and sound was a little sparse, but the sheer depth of gameplay was hard to match.

24 Everybody's Golf

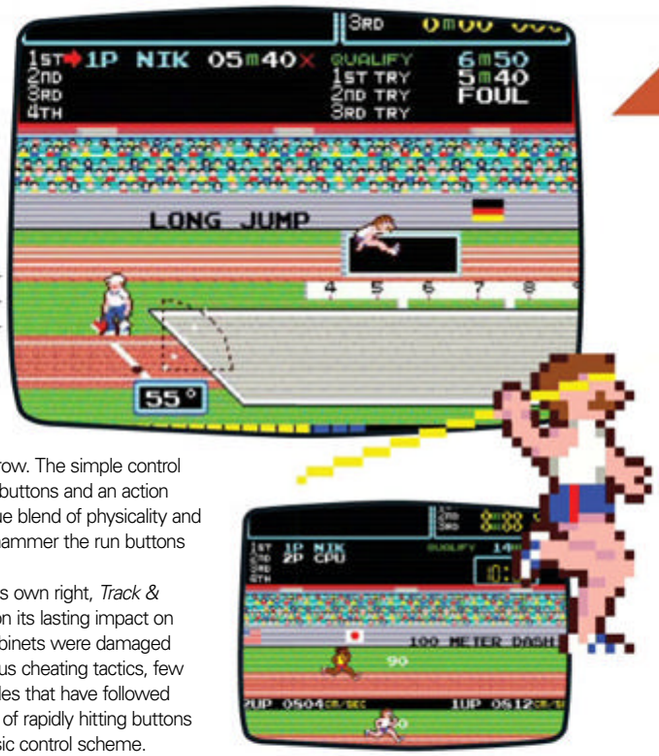
DEVELOPER: Camelot Software Planning
YEAR: 1997 **FORMATS:** PlayStation

There's a secret to the success of the *Everybody's Golf* series: while the cartoonish characters might not make it look like the most serious of golf games to the uninitiated, the game offers some serious depth. Players have a strong degree of control over their shots and the courses are very well designed. Plus, if you get bored of serious golf, there is always the game's mini-golf mode for you to indulge in.

23 Mario Tennis

DEVELOPER: Camelot Software Planning
YEAR: 2000 **FORMATS:** N64

The popularity of *Mario Kart* in the world of racing games led Nintendo to believe that a similar formula could work with sports, and it wasn't wrong. The real fun in *Mario Tennis* comes from the addition of power-ups to regular matches, which then quickly spiral out of control when the bananas and green shells start flying like crazy!



Track & Field

DEVELOPER: Konami
YEAR: 1983 **FORMATS:** Arcade, Various

22 Konami's arcade classic offers six sports taken straight from the Olympic track and field events such as 100 metre sprint, 110 metre hurdles, long jump, high jump, javelin throw and hammer throw. The simple control scheme omits a joystick, offering just two run buttons and an action button, and manages to approximate the unique blend of physicality and skill required by sport – usually by having you hammer the run buttons and time your press of the action button.

Beyond simply being an enjoyable game in its own right, *Track & Field*'s place in your Top 25 is assured based on its lasting impact on the sports genre. While many *Track & Field* cabinets were damaged by over-zealous players and some rather dubious cheating tactics, few developers of multi-sports games in the decades that have followed have deviated from the game's basic template of rapidly hitting buttons to do things – a ringing endorsement of a classic control scheme.

> "THE ORIGINAL AND THE BEST, I WISH EA WERE STILL THIS GOOD" *crusto*

Windjammers

DEVELOPER: Data East
YEAR: 1994 **FORMATS:** Arcade, Neo Geo

21 *Windjammers* is a unique game in which two players throw a flying disc at each other, which doesn't actually resemble any existing disc-based sports. The aim of the game is to slam the disc into a goal behind the opponent worth either three or five points, or else score two by landing the disc short of goal in your opponent's side of the court. In practice, it most resembles *Pong* or air hockey.

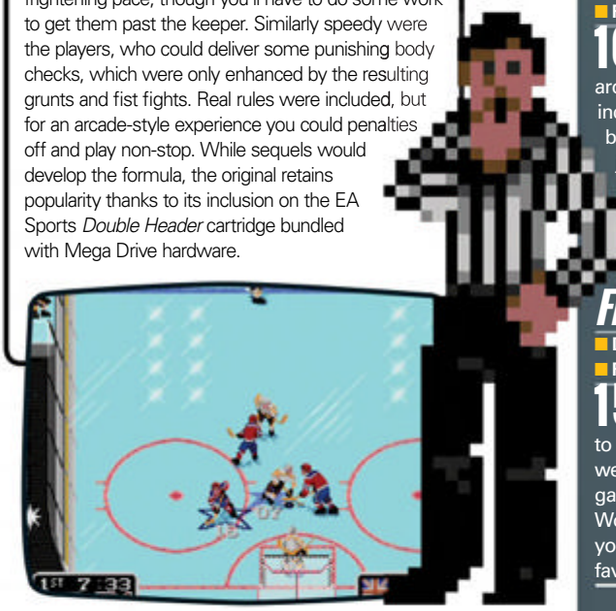
This has all the hallmarks of a great Nineties arcade game, with colourful visuals, fast-paced action and absurd special moves. However, it's the multiplayer aspect of the game that earns the game its spot in this top 25 – two players of a similar skill level will always have a fierce match, but there's depth for players to develop their skills and outshine their opponents.

EA Hockey

DEVELOPER: Park Place Productions
YEAR: 1991 **FORMATS:** Mega Drive

20 Known as *NHL Hockey* in North America, this game was a landmark release as it was the first game to incorporate the now-famous EA Sports branding. The key goal for the game was to create a realistic depiction of ice hockey, both in terms of gameplay and presentation. Neat graphical touches lent the game an appearance that resembled a televised game, such as the branded score display, cut-away animations for players making their way to the penalty box and picture-in-picture close-ups during face-offs.

Similar attention to detail was paid to the game design. Passing is accurate and shots can fly off at a frightening pace, though you'll have to do some work to get them past the keeper. Similarly speedy were the players, who could deliver some punishing body checks, which were only enhanced by the resulting grunts and fist fights. Real rules were included, but for an arcade-style experience you could penalties off and play non-stop. While sequels would develop the formula, the original retains popularity thanks to its inclusion on the EA Sports *Double Header* cartridge bundled with Mega Drive hardware.



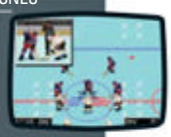
SSX 3

DEVELOPER: EA Canada **YEAR:** 2003
FORMAT: PS2, Xbox, Gamecube

19 Absurd tricks, outrageous personalities and off-piste shortcuts are the order of the day in this snowboarding classic. Replacing the menu screens with journeys down open mountain peaks really set this sequel apart from its predecessors.

NHLPA Hockey 93

DEVELOPER: Park Place Productions
YEAR: 1992 **FORMAT:** Mega Drive, SNES



18 The addition of a league feature and real hockey stars ensured the superiority of *NHLPA Hockey 93* over its predecessor, while the ability to get into spontaneous fights saw it receive the nod over the more realistic and restrained *NHL 94*.

NBA Jam Tournament Edition

DEVELOPER: Midway **YEAR:** 1995
FORMAT: Arcade, Various

17 For serious players, this update offered more players, injuries and additional player statistics. For everyone else, there was a whole host of outrageous secret characters such as Bill Clinton not to mention there was now awesome new dunks to gawp at.

Winter Games

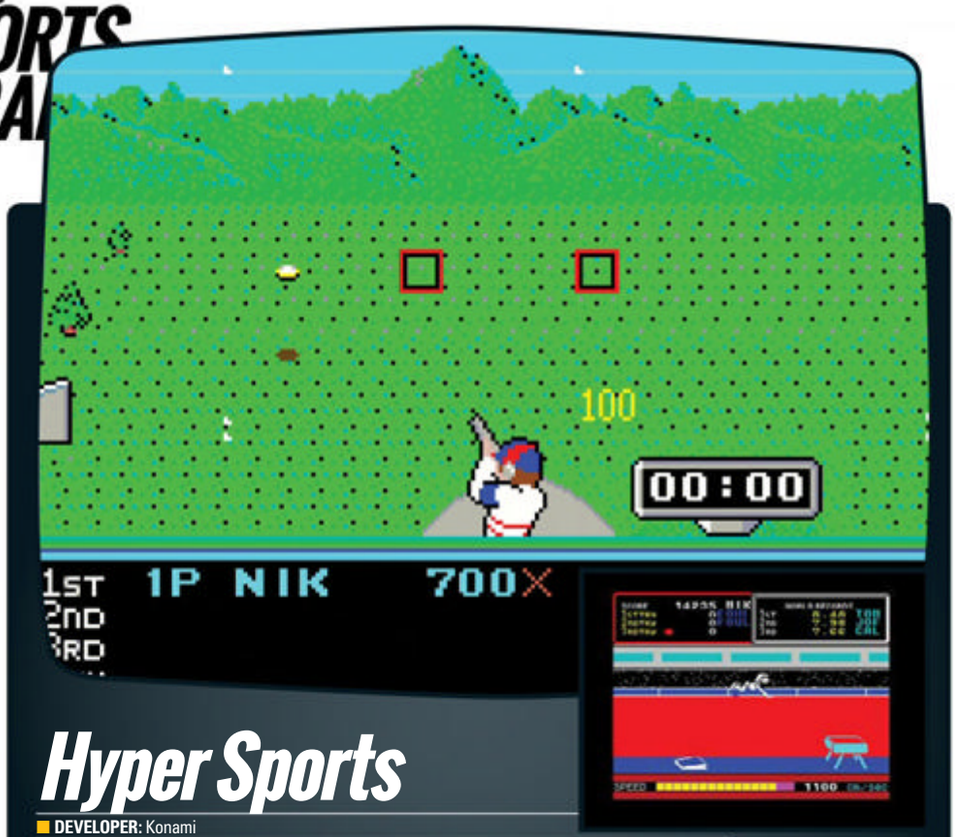
DEVELOPER: Epyx **YEAR:** 1985
FORMAT: Various

16 This title captures the many thrills of sliding around on snow and ice, including events such as the biathlon, figure skating, ski jumping and bobsled. With great visuals and excellent controls the game remains one of our favourite winter sports titles.

FIFA: Road To World Cup 98

DEVELOPER: EA Canada **YEAR:** 1997
FORMAT: Various

15 After a couple of false starts, EA finally managed to get the *FIFA* series working well in 3D with this fast-paced game. If qualifying for the World Cup got too tough, you could always punch the keeper – a favourite feature amongst casual fans.

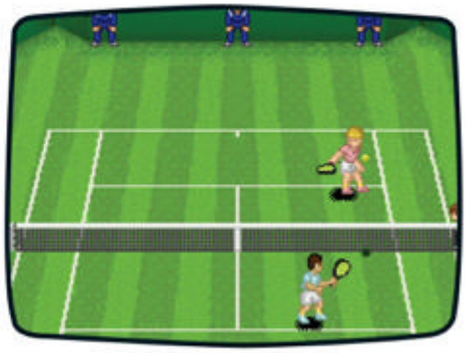


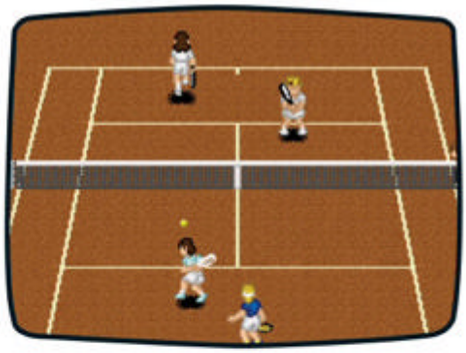
Hyper Sports

DEVELOPER: Konami
YEAR: 1984 **FORMATS:** Arcade, Various

14 Konami's follow-up to *Track & Field* featured seven brand new events for players to tackle: swimming, skeet shooting, long horse, archery, triple jump, weight lifting and pole vault. The excellent control scheme of the original game was retained, allowing players to get straight down to action, and though the events weren't quite as strong the game was popular regardless.

It's not the arcade game alone that has propelled the game so high. Many readers mentioned their love for the excellent home conversions of *Hyper Sports* on the C64 and Spectrum, which each scored 90%+ scores in *Zzap!64* and *Crash* respectively and both offer an experience close to that of the arcade game. It's rare that a conversion is as revered as the original, but these versions of H*yper Sports* have achieved that status.

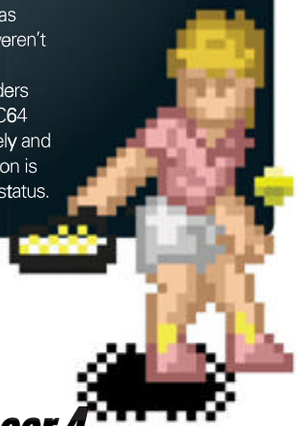




Super Tennis

DEVELOPER: Tokyo Shoseki
YEAR: 1991 **FORMATS:** SNES

12 Tokyo Shoseki isn't a name that springs to mind when you think of the greatest developers of all time – in fact, its actual main line of business is producing textbooks – but its *Super Tennis* is one of your favourite sports games of all time. That should come as no surprise to anyone who has played the game, as it was critically acclaimed upon release due to its excellent controls and fiercely competitive multiplayer, which still draws players to tournaments today. *Super Tennis* is also presented excellently, as the court is twisted around via Mode 7 effects during little intermission cutscenes that show the player switching sides, and the players themselves are rather cute too – especially when they celebrate points scored or curse their mistakes. *Super Tennis* is still the pinnacle of videogame tennis for many of you dear readers, and if you are an avid fan of the multiplayer mode, you might just agree.



"MY MASTER LEAGUE ADVENTURES WERE LIKE THE GREATEST RPG EVER" *binaryRooster*

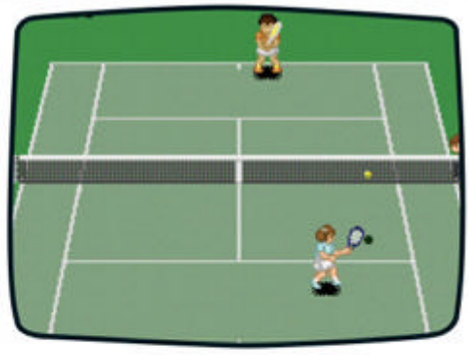
Pro Evolution Soccer 4

DEVELOPER: Konami Computer Entertainment Tokyo
YEAR: 2004 **FORMATS:** PS2, Xbox, PC

13 Though the *FIFA* series has rarely been bested commercially, it was Konami's *Pro Evolution Soccer* that dominated much of the Noughties in critical terms, playing a better game than EA's titan year after year. For **Retro Gamer** readers it was 2004's *Pro Evolution Soccer 4* that stood out as the best – which makes a lot of sense, as the game was released at the height of its generation and was open to a broader audience due to being available on Xbox for the first time.

The game's improvements included an expanded *Master League* mode, greater editing capabilities and the addition of the referee as an on-pitch figure during the game. This all added to a game that not only looked superb but played amazingly well. Whether you played it alone or with some friends, playing some *Pro Evolution Soccer 4* was a truly excellent experience.

"NEVER LIKED PLAYING TENNIS, BUT I LOVED PLAYING THIS. SUBLIME IN MULTIPLAYER" *TheDude18*

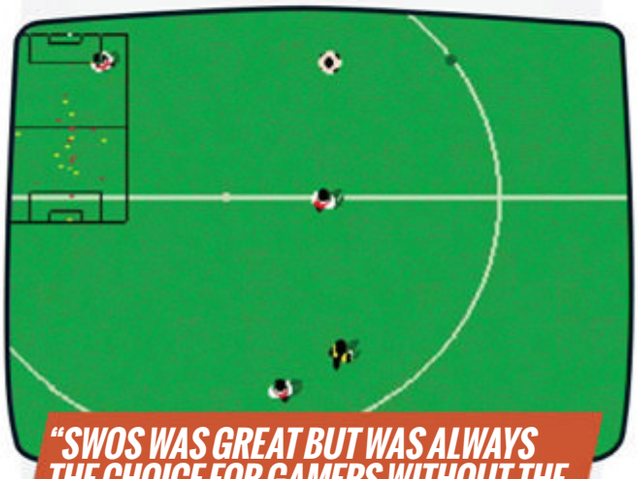


Kick Off 2

DEVELOPER: Dino Dini **YEAR:** 1990 **FORMATS:** Various

11 There's something to be said for that fact that over two decades after its release, players travel internationally to compete in *Kick Off 2* competitions and even maintain an approved competition version. The strength of feeling that Dino Dini's most famous game inspires in its supporters is enormously impressive, and the fact that it was a single vote away from achieving a top ten here reflects that.

Kick Off 2 retained the speedy top-down gameplay of its predecessor, including the control system which dispensed with the 'sticky feet' of players – requiring the ball to be trapped before passing or changing direction. It's a control system that divides players, but those who champion it praise its realism and the level of skill required to master it. Improvements over its predecessor included a far wider variety of customisation options and new abilities, such as curving shots. *Kick Off 2* was exactly the football game that the 16-bit computers needed when it arrived, and the fact that it delivered has earned it the enduring fondness of its fans.



"SWOS WAS GREAT BUT WAS ALWAYS THE CHOICE FOR GAMERS WITHOUT THE SKILL TO PLAY KICK OFF 2" HalcyonDaze00

International Track & Field

DEVELOPER: Konami

YEAR: 1996 **FORMATS:** Arcade, PlayStation

10 The arrival of 32-bit consoles in the mid-Nineties was a real boon for fans of multi-sports titles, as whether you chose the PlayStation or Saturn, you'd have an excellent title available to play. Sega's *Decathlete*, later released on the Saturn as *Athlete Kings*, was fairly shameless in its appropriation of Konami's time-tested *Track & Field* gameplay and boasted cartoonish characters with smooth, high-resolution visuals. Luckily for PlayStation owners, *Track & Field* itself was revived in full 3D by Konami at the same time and like its competitor offered some very colourful visuals, with a slightly more grounded look. Of course, the PlayStation won the day in the Nineties so it's unsurprising that the PlayStation offering is the one that makes your list here.

In gameplay terms, *International Track & Field* is largely unchanged from the original arcade titles – you'll spend much of your time bashing buttons to go faster. What has changed is the list of events, which now includes all six of the events from the original *Track & Field* as well as swimming, pole vault and triple jump from *Hyper Sports*. Shot put and discus were also included for the first time to round out the throwing events. Also, for the first time, four players could compete in events simultaneously thanks to the support for the PlayStation's multitap. The game was further enhanced by excellent presentational touches. For example, after your event was over, the camera would pan to the stadium's enormous scoreboard to display a replay and the updated scores.

International Track & Field is a game that shows the value of updating old ideas for newer technology. It wasn't anything but a new version of the games which had come before, with the added inclusion of a few more events and flashier visuals – but given how well the old games worked in the first place, it didn't need to be anything else in order to be one of the best sports games ever.

Daley Thompson's Decathlon

DEVELOPER: Ocean Software **YEAR:** 1984 **FORMATS:** ZX Spectrum, C64, Amstrad CPC

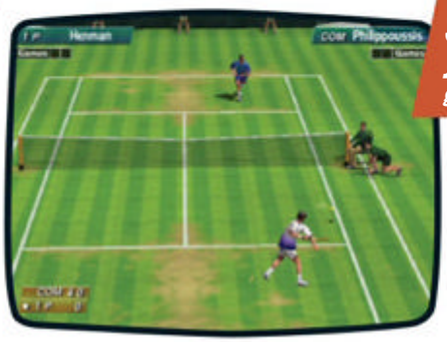
9 With most joysticks having only one button in the heyday of the 8-bit micros, Ocean had to do something else to replicate the button-mashing joy of *Track & Field*. The ultimate result was of course rapid waggling of the joystick, resulting in an enormous number of broken joysticks and abnormally muscular forearms. However, the game impressively included the full ten events (admittedly split over both sides of the tape) and every broken joystick suddenly felt worthwhile in that moment when you finally smashed a world record you'd been chasing for ages. Sequels followed, but our readers have plumped for the original smash hit.

Tony Hawk's Pro Skater 2

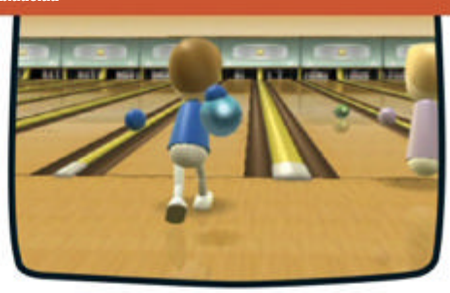
DEVELOPER: Neversoft **YEAR:** 2000 **FORMATS:** Various

8 We distinctly remember playing *Tony Hawk's Skateboarding* shortly after the sequel was announced and wondering how it was possible to improve upon such a great game. It turned out that Neversoft had the answer: more of *everything*, such as bigger stages with more secrets, more goals to achieve in career mode, and longer combos thanks to the addition of the manual, which allowed players to perform tricks while on flat surfaces. If you ever got bored of the stages and skaters, you could even create your own, extending the lifespan of the game enormously. Add to that an excellent soundtrack comprised of hip hop, punk and metal and visuals that stretch the PlayStation and you have a near-perfect extreme sports game. We're still beating our high scores to this day.

TOP 25
SPORTS GAMES



"COME ON, EVERYONE WHO HAD A WII SPENT A MASSIVE CHUNK OF THEIR TIME JUST PLAYING BOWLING BY ITSELF" gunbladelad



California Games

DEVELOPER: Epyx
YEAR: 1987 **FORMATS:** Various

7 Developers often face a problem with multi-sports games: once games based on the events of both the summer and winter Olympics have been done, what comes next? The answer for Epyx was to head to the Golden State of California for some rather less strictly governed competition against beautiful sun-drenched backdrops. Six events are included: half pipe, roller skating, surfing, BMX, footbag and flying disc. Unlike the majority of multi-sports titles, these games don't involve *Track & Field*-style button smashing, rather relying on precise joystick movements and expert timing, giving players a welcome rest. *California Games* accounts for itself well across multiple formats, too – the C64 version is perhaps the most well-known, but the spotlight also shines on formats as diverse as the Master System, Lynx and even the Atari 2600, ensuring that everyone can bust it out over the summer.

Virtua Tennis

DEVELOPER: Sega AM3
YEAR: 1999 **FORMATS:** Arcade, Dreamcast, PC

6 While Sega tackled a number of sports under its *Virtua* brand including football and basketball, it was *Virtua Tennis* that truly broke free of the group and it's not hard to see why. The game looked absolutely phenomenal in 1999, with detailed player models, realistic courts and amazing animation, and the gameplay matched that level of quality. Rather than requiring players time their shots perfectly with the arrival of the ball, *Virtua Tennis* allows players to anticipate an incoming ball with an early button press, allowing for stronger shots and better control. The World Circuit mode in home versions provided long-term value, as well as excellent mini-games which add significant appeal in their own right.

Wii Sports

DEVELOPER: Nintendo EAD Software Development Group 2
YEAR: 2006 **FORMATS:** Wii

5 We're pleased to see that *Wii Sports* is so highly thought of amongst the **Retro Gamer** readership, as it's certainly significant as one of the best killer apps in recent history. *Wii Sports*' beauty is its simplicity – the motion controls simply require players to act as if they're playing the real sport, making it an enormously accessible game. Not every sport represented is equally good, but all of them feature some level of depth beneath the surface and the best of them will eat up hours of your life in multiplayer mode. – particularly our favourite, bowling.

"PLAYED THIS ONE FOR HOURS & ENDED UP WITH REALLY SORE HANDS FROM HOLDING THAT GAME PAD" Morkin

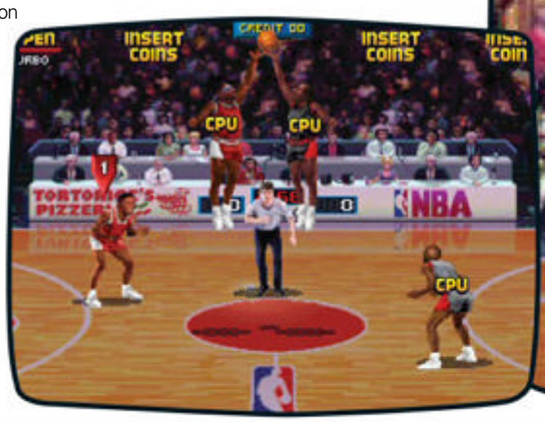
NBA Jam

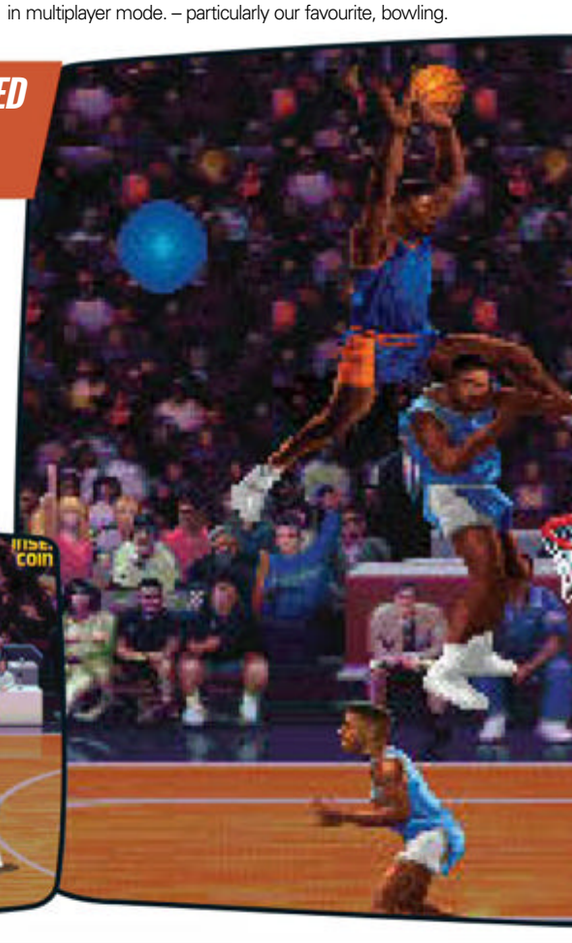
DEVELOPER: Midway **YEAR:** 1993 **FORMATS:** Arcade, Various

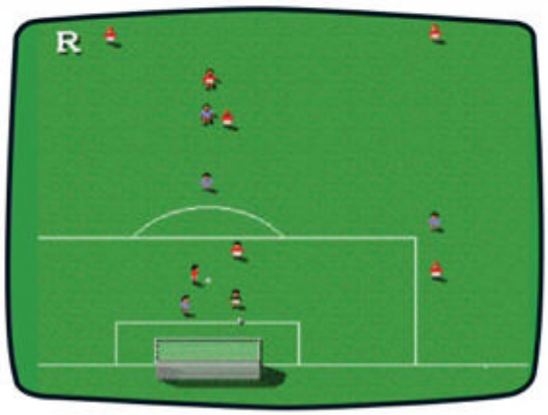
4 For all of the showmanship that non-fans of basketball might attribute to the sport, the game itself is actually a rather stuffy affair, bound up with lots of rules and frequent fouls which cause the flow of the game to break down. But while that's true of basketball, it's not true of *NBA Jam*, which played fast and loose with the rules of the real sport to create the best arcade sports game of all time.

NBA Jam cuts the game of basketball back to the bare minimum, with two-player teams and very few rules. Three-point shots are in, players are automatically prohibited from travelling and you can still be caught by the shot clock or for goal tending. However, the court is surrounded by an invisible wall and personal fouls aren't enforced, meaning that the game is a non-stop and rather rough version of the sport which is well-suited to the arcade environment. The game does add one crucial rule, though – any player that scores three baskets in a row is declared 'on fire' and will set the ball ablaze whenever they touch it, as well as having infinite turbo and better shooting ability.

The rules weren't the only things that Midway played with for added impact. Players were given the ability to perform absurd leaps in order to perform dunks, with a wide variety of flashy animations to rub salt into the wounds of your opponent every time you pulled one off. This was just one part of an amazingly well presented game, though. Digitised scaling sprites allowed you to recognise the players easily – a real novelty at the time – and the endlessly quotable commentary didn't just add to the game, but passed into the basketball lexicon.







Sensible Soccer

DEVELOPER: Sensible Software
YEAR: 1992 **FORMATS:** Various

3*Microprose Soccer* had impressed the 8-bit computer enthusiasts in the late Eighties, but it was the spiritual follow-up four years later that really captured the attention of the wider audience. *Sensible Soccer* featured a greatly expanded view of the pitch and simplified controls as compared to the likes of *Kick Off 2*, making for a more accessible game overall. For most players including the whole console audience, *Sensible Soccer* was as good as football games would get during the mid-Nineties. But for Amiga and PC owners, one game surpassed it – and it shouldn't be hard to guess which…

"SIMPLY INCREDIBLE. A PERFECT MIX OF SPORTS GAME AND ACTION" *STranger81*

"IT MAKES YOU CARE ABOUT YOUR PLAYERS IN A WAY ALL MODERN FIFA AND PRO EVO GAMES COULD ONLY DREAM OF" *Treguard*

Sensible World Of Soccer

DEVELOPER: Sensible Software
YEAR: 1994 **FORMATS:** Amiga, PC, Xbox 360

2Appearances can be deceptive. From looking at screenshots of *Sensible World Of Soccer*, you can see some slight aesthetic improvements – a nice pitchside stadium and a permanent clock in the top-left corner – but nothing that might justify such a high placement. Similarly, playing a single match couldn't tell you much more than the fact that you are now able to perform some light headers and tackles.

The improvements in *Sensible World Of Soccer* go far below the surface, you see – the game greatly expanded your options as a manager, adding a substantial amount of depth to what was already the greatest football game on the market. *Sensible World Of Soccer* has hundreds of teams and thousands of players, all of whom have individual attributes that you'll need to pay attention to, as you're afforded an unprecedented degree of tactical control over your games. Formations were just the start – players could be instructed on an individual basis, leading to a surprising sense of attachment to characters that stand only a few pixels tall.

While the game has enough single-player content to last anyone, particularly the lengthy 20 year career mode, the heart of *Sensible World Of Soccer* comes from its extremely competitive multiplayer – the enduring popularity of which led to its release on the Xbox 360, allowing for official online support. A group of dedicated players still meet up across Europe to play at the popular Sensible Days competitions to this day.

By adding to an already excellent football game, Sensible Software scored a critical smash hit. We'd have to be incredibly impressed by a game to declare that it had managed to "destroy all of its direct rivals in an explosion of apocalyptic dimensions," but those were the exact words of *Amiga Power*'s 95% review – one which reflected the general sentiment of players then and now. For **Retro Gamer** readers, *Sensible World Of Soccer* is the most beautiful version of the most beautiful game. In fact, only one sports game surpassed it in your estimation – but that's a matter we will discuss it a little more fully on the next page…

TOP 25 SPORTS GAMES

SPEEDBALL 2

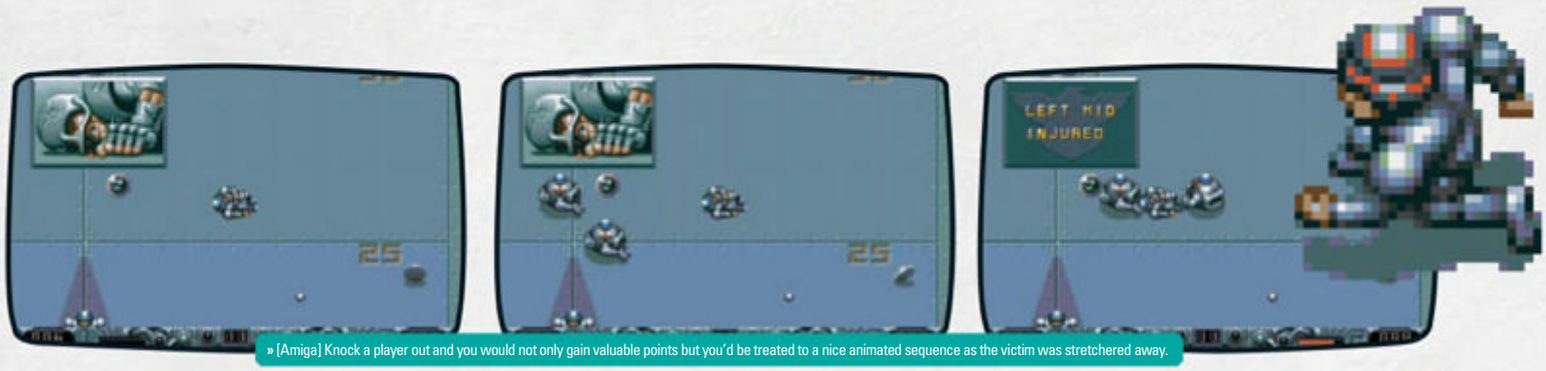
BRUTAL DELUXE

retro GAMER READERS' CHOICE

A classic that's so good it's made the top of two of our reader surveys. With that in mind we felt it was high time that David Crookes interviewed Mike Montgomery and Robert Trevellyan about their smash hit sports game

IN THE KNOW

- **PUBLISHER:** IMAGE WORKS
- **DEVELOPER:** THE BITMAP BROTHERS
- **RELEASED:** 1990
- **PLATFORM:** VARIOUS
- **GENRE:** FUTURISTIC SPORTS



» [Amiga] Knock a player out and you would not only gain valuable points but you'd be treated to a nice animated sequence as the victim was stretchered away.

"Ice cream, ice cream," shouts the seller, the words cutting through the tension as the seconds tick away of the second half with only five points putting distance between the opposing sides. The metal thud of the ball reverberates as the players dart mesmerisingly around the cold, grey arena. But then, as a sliding tackle knocks a hapless opponent to the floor, there is a moment of stone-hearted relief as he fails to get back up again. With the medics carrying him off, Brutal Deluxe are perversely awarded ten points and the advantage swings 180 degrees. In exhaustion, the gamer puts down a battered joystick and, with a wipe of a sweaty hand, manages a triumphant, if not exhausted, smile.

This is *Speedball 2*, a game developed by the acclaimed Bitmap Brothers which was released in 1990, two years after its predecessor had caught the mass attention of players. This time around the game was set in 2105, a short while after the sport was said to have to have been reborn in an attempt to regain public interest following years of corruption and violence. As the opening titles explained, the fictional sport had been forced underground to fester in unregulated chaos. *Speedball 2* was its saviour and it brought with it a whole new set of rules.

Players who expected a straightforward sequel to *Speedball* were pleasantly surprised by the series' second outing. According to The Bitmap Brothers' co-founder Mike Montgomery, the sequel had been completely rewritten. Although the ethos of the earlier incarnation had been retained, *Speedball 2* brought with it new mechanics and an improved feature set. It also introduced Brutal Deluxe, a badly performing team that the player had to turn into champions.

In order to achieve the new feel to the game, The Bitmap Brothers made changes to the original development team. Dan Malone replaced Mark Coleman as the artist, and Richard Joseph replaced David Whittaker as the musician. Robert Trevellyan was given the role of coder, with additional input from Mike who had assumed a greater programming role during the first game. This time out, the design was credited to Bitmap Brothers co-founder Eric Matthews.

"I think the whole concept of *Speedball 2* was different," says Mike. "What we wanted to do with *Speedball 2* was all of the things that we really didn't have time to do with *Speedball*. So the viewpoint was slightly changed, the graphics were a lot better – it was a different game to a certain extent, wasn't it? I think *Speedball 2* was just a natural progression."

Speedball 2 was Robert's first published game. Although he had been a keen hobbyist programmer, his one previous stab at a game, for Electric Dreams in Southampton, had been canned after six months but the lead artist on that title had put Robert in touch with The Bitmap Brothers. The team was impressed by an eight-way scrolling demo which Robert had shown them running on a Commodore 64. "It convinced them that I was worth a try," he admits.

The game's lead platform was the Atari ST. "It was the less powerful of the machines, certainly when compared to the Amiga, so the idea was to make it great on the ST and then enhance it on Commodore's machine," says Robert. He said the brief was to address "all of the things that had felt limited in the first game." One of those was the playing area, which, in the original, had very little width and would simply involve players trying to get the ball up towards the goal in order to score a goal.

» [Amiga] A letter above a player's head denoted their playing position while a curve showed a player that could be passed to.

"SPEEDBALL 101"

■ *Speedball 2* is a top-down, 2D, futuristic, deep and violent game that is part-ice hockey and part-American football. Each smooth-scrolling match is split into two halves lasting 90 seconds each, during which players score as many goals as possible while grabbing extra points by nobbling the opposition or aiming the ball at point-scoring stars. Good use of tactics and the score multiplier are essential to win a game.

FEELING HUNGRY? IT'S RICHARD JOSEPH'S FAULT

Discover why Speedball 2 loves its icecream

Quite aside from the game's intro being a computerised version of a song called *Brutal Deluxe* by a band called Nation 12 (a collaboration between the electronic pioneer John Foxx and Tim Simenon from Bomb The Bass), *Speedball 2* was able to showcase the talents of the gaming audio legend Richard Joseph who died in 2007 at the age of 53 following a short battle against lung cancer. His approach to the problem of creating memory-hogging crowd sounds was inspiring.

"Richard came in one day and said, 'Mike, I don't really want to show this audio to anyone else until you have listened to it and given your approval because I'm not really sure'" recalls Mike. "So I said, 'okay, come in', and we went into another room. He played that clip 'ice cream, ice cream' and I went, 'shit, that has just to go in, there's no argument about it, I don't care what anyone else says, that has to go in full stop.' And of course it became a famous phrase in the industry, and I even had it on my doorbell at some point. Richard was just a genius like that and we worked so well together. It's a shame that he passed away. What would he be doing now?"

HISTORY OF SPEEDBALL

Your guide to the short-lived series

SPEEDBALL

■ The Bitmap Brothers planned a game based on real tennis, the sport from which lawn tennis is derived but Mastertronic decided against it. After hitting the pub and redesigning the game on the back of a cigarette packet, *Speedball* was born. Praised for its action, it was also criticised for jerky scrolling.

SPEEDBALL 2: BRUTAL DELUXE

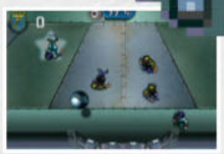
■ This eight-directional frantic sweat-'em-up of catch-and-throw was a huge improvement on the first game, racking up the tension by emphasising the amassing of points over the simplicity of scoring goals, and providing a level of depth rarely seen in any sports game, let alone one based on a fictional pursuit.

SPEEDBALL 2100

■ *Speedball 2100* was a 3D version of the series for the PlayStation, "but it didn't do too well for various reasons," says Mike Montgomery. It concentrated too much on side issues, such as the skin and hair colour of its players, and less so on refining the on-pitch experience for a new next-generation audience.

SPEEDBALL 2 TOURNAMENT

■ Released in 2007 on Steam, the same year that a faithful remake of *Brutal Deluxe* hit Xbox Live Arcade, *Speedball 2 Tournament* rode on the back of a *Half-Life 2* mod called *SourceBall*. Mike Montgomery oversaw development and the polygon characters looked markedly different. It brought online play to the game too.



SPEEDBALL 2: EVOLUTION

■ As with many retro games, *Speedball 2* found its way to iOS, Android and PSP ,and proved itself to be a timeless gem. Despite some disappointing AI, the translation was a success, allowing for the use of the virtual joystick while supporting the accelerometer of mobile phones.

SPEEDBALL 2 HD

■ The relatively recent release of this PC game gave the original game a glossy graphical sheen. It had input from Mike Montgomery and *Sensible Soccer* creator Jon Hare and it replicated the distinctive look of the 16-bit originals while serving six new *Speedball* arenas. Steam still has the game for £6.99/$9.99.

"In the first game, you only ever played 'up' the screen but in the second they wanted to expand this," he explains. By creating a larger playing area for *Speedball 2*, the developers were able to increase the number of players on the pitch from five on each side to nine, and it also allowed the game to be played with far greater freedom while allowing action in the centre of the pitch to be just as vital at that at either end, for reasons we will come to later.

"The pitch was about three times bigger because we had learned how to scroll the screen a lot better," says Mike. "The larger playing area enhanced the game, and it allowed for more things to do. It also enabled players to make better use of tactics. By having this wide, open scrolling, there were more players that would be off the field. We wanted players to work out where they may be and to plan ahead, things like that. Getting to grips with the technology and mechanics of the game in this way also let us work on the overall look and feel of the game to the point that, technically, *Speedball 2* was a lot better than the original game."

Work on the game's playing field had come first. "We made a very simple background for most of the screen, using 16x16 tiles for the main areas of the pitch because the Atari ST didn't have the graphic acceleration hardware that the Amiga had," Robert explains. "That allowed us to put some bonus features around the edges of the screen and the bouncers on the pitch. Those bouncers were the only unique elements on the pitch – the rest of it was a repeating pattern and it meant the game could flow much better."

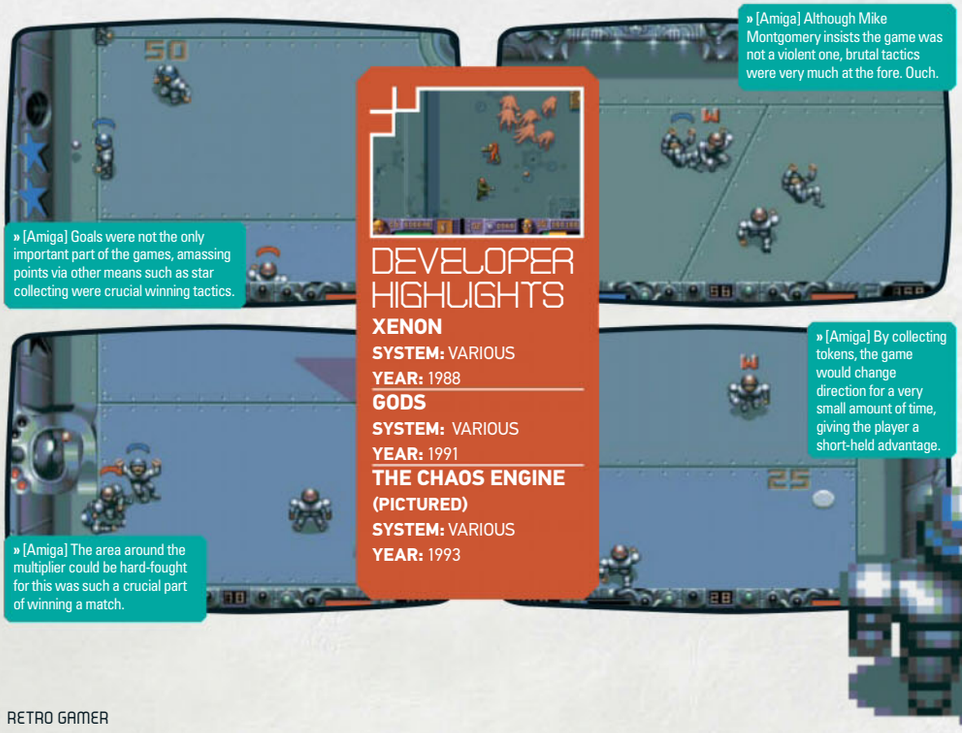
> **"The pitch was a lot bigger because we had learned how to scroll the screen a lot better"**
>
> Mike Montgomery

During the subsequent conversion to the Amiga, the background was enhanced. The palette was upped from 16 to 32 colours and the design became, as Robert explains, "more interesting". For the ST, it was a case, he remembers, of "blasting most the screen background very quickly," and having preloaded registers, whereas on the Amiga, the team could make use of the various graphics acceleration chips. "We were squeezing everything that we could out of these machines," says Robert. "But I was this young guy with his foot in the door of the games industry and loving it. I had the confidence that I had the skills and ability to make it happen."

To aid him in developing the game (which also saw many outings on handheld and home consoles), he was able to make use of in-house library routines that The Bitmap Brothers had created. They had some basic sprite routines and code set up on the Amiga but the main issue was that the coders were working with the same amount of memory for *Speedball 2* as they were for *Speedball*. "Cramming all of that in was a problem because we had to work with the lowest spec machines," says Mike.

"There were bits and pieces and skeleton code that were useful although almost all of the code was new," Robert continues. "Even with their library of sprite routines, I saw there was an optimisation we could perform on the main loop. I also instinctively took an object-orientated approach to the software before the concept of software engineering became the way. All of this combined to make a bigger and better version of the original *Speedball* game."

It was also fast. "The frame-rate was a lot better," says Mike, "and that was important because the better it was, the better the game experience of that type of game would be. It wouldn't matter for a turn-based game but with an action game, you



» [Amiga] Goals were not the only important part of the games, amassing points via other means such as star collecting were crucial winning tactics.

» [Amiga] Although Mike Montgomery insists the game was not a violent one, brutal tactics were very much at the fore. Ouch.

» [Amiga] By collecting tokens, the game would change direction for a very small amount of time, giving the player a short-held advantage.

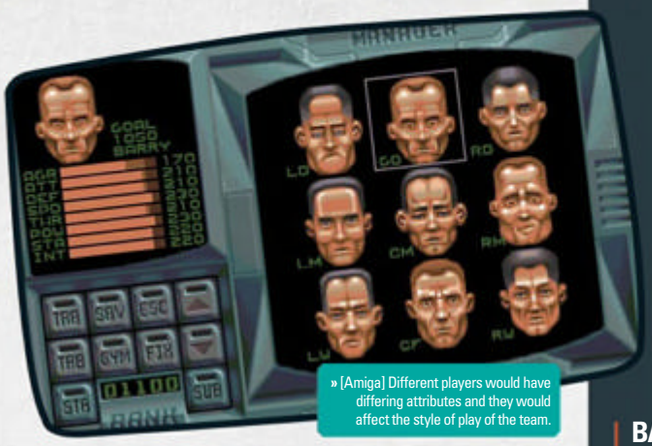
» [Amiga] The area around the multiplier could be hard-fought for this was such a crucial part of winning a match.

DEVELOPER HIGHLIGHTS

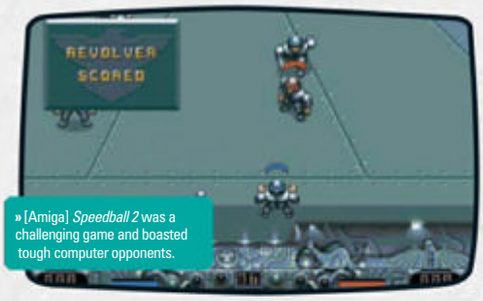
XENON
SYSTEM: VARIOUS
YEAR: 1988

GODS
SYSTEM: VARIOUS
YEAR: 1991

THE CHAOS ENGINE (PICTURED)
SYSTEM: VARIOUS
YEAR: 1993



» [Amiga] Different players would have differing attributes and they would affect the style of play of the team.



» [Amiga] *Speedball 2* was a challenging game and boasted tough computer opponents.

needed to be slick and quick." Players would have to keep an eye on the kind of players that were in view on the pitch. Icons above their heads would reveal whether the sprites were open to a pass and they would indicate their playing position – W for Winger, D for Defence, M for Midfielder and F for Forward – to allow gamers to make effective passes.

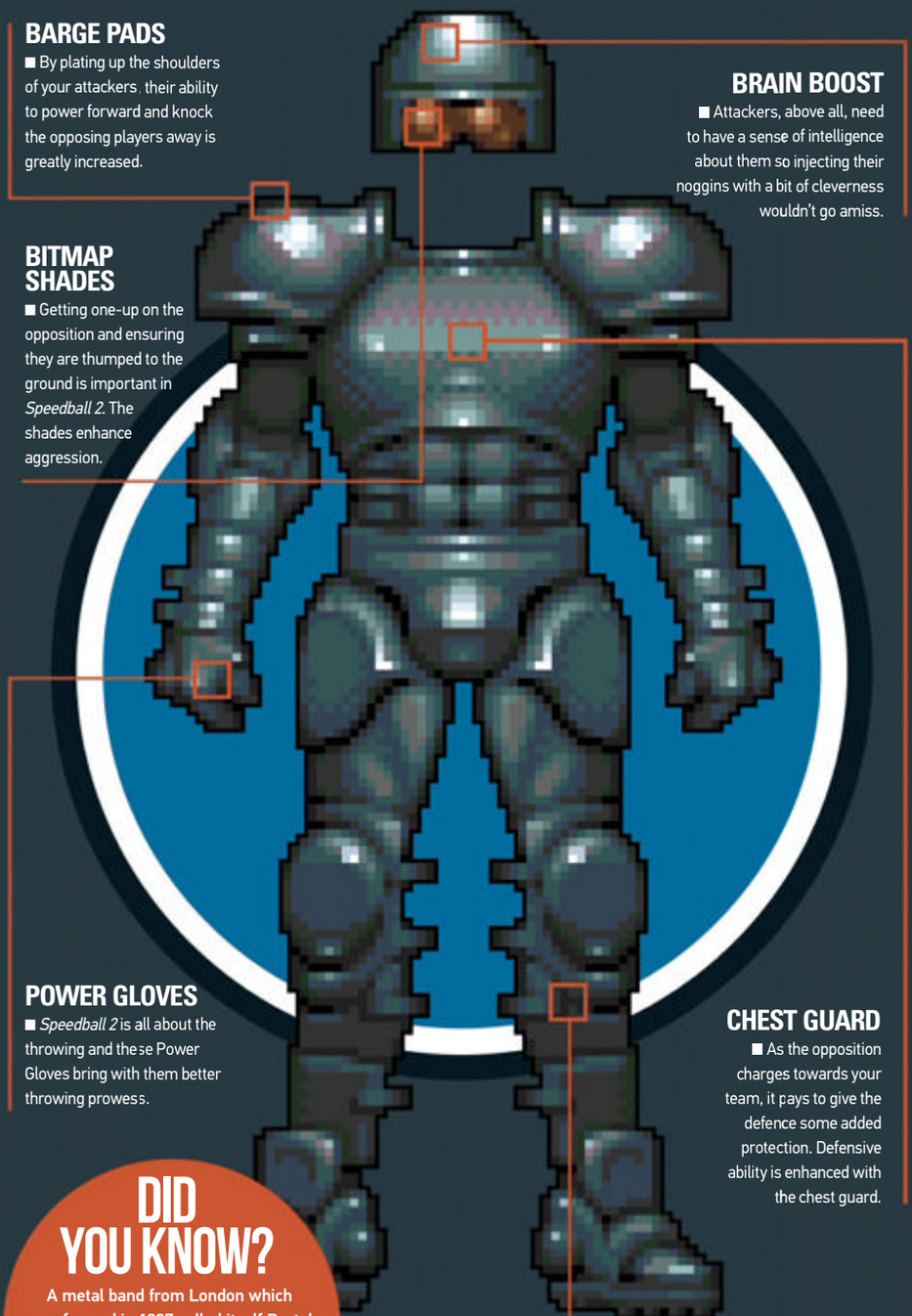
There were lots of power-ups too which would reverse the controls, increase player stats, protect players or zap opponents. Some would boost player attacks and others would give an injection of stamina. Coins could be collected and be spent on player enhancements. There was even a management element, letting gamers choose a manager before training and building up nine players and three subs (while dipping into the transfer market for star players). It was possible to develop players one by one. "The management elements were added to give greater depth," says Robert. "But we made it so that people who didn't want to think about it could click auto and have the game spend the money on enhancing players while those that did want to get stuck in were able to think about who they wanted in the team and the attributes they wished to choose."

As well as having warp holes which would instantly teleport the ball from one side of the playing space to the other, *Speedball 2*'s gameplay – whether league, cup or one-off match – was enhanced by the addition of many new features, the combined nature of which changed the approach players would have towards the game. There was an overhauled scoring system, which not only put a fresh twist on the points a goal would amass for a team, but allowed players to chalk up better scores according to the tactics they employed over the course of each half.

The most important of these were the coiled score multipliers which lay across from the centre of the arena to the left and right of the screen, each containing a set of lights and each of them capable of giving players a points bonanza. By throwing the ball up the ramp of the multiplier, it was possible to increase the number of points that was awarded for goals and other score-enhancing feats.

POWER-UP

Spending a little bit of time in the gym to upgrade the attack, defence, stamina, aggression and intelligence levels of your team is well worth your while



BARGE PADS

■ By plating up the shoulders of your attackers, their ability to power forward and knock the opposing players away is greatly increased.

BRAIN BOOST

■ Attackers, above all, need to have a sense of intelligence about them so injecting their noggins with a bit of cleverness wouldn't go amiss.

BITMAP SHADES

■ Getting one-up on the opposition and ensuring they are thumped to the ground is important in *Speedball 2*. The shades enhance aggression.

POWER GLOVES

■ *Speedball 2* is all about the throwing and these Power Gloves bring with them better throwing prowess.

CHEST GUARD

■ As the opposition charges towards your team, it pays to give the defence some added protection. Defensive ability is enhanced with the chest guard.

SPEED BOOTS

■ As the name suggest these enhance the speed at which an individual player is able to chase around the pitch.

DID YOU KNOW?

A metal band from London which was formed in 1997 called itself Brutal Deluxe in homage to *Speedball 2*. It released three albums and numbered Johnny D.Brutal, Guary MacSeanlaoic and Christian D.Lux as members.

SPEEDBALL TIPS

Learn to play with Robert and Mike

SHOOT WELL

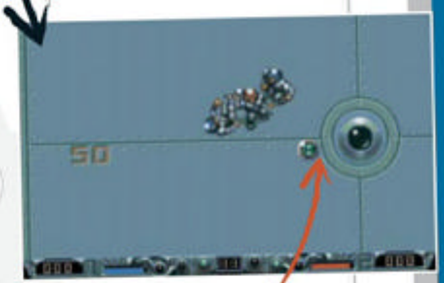
■ "You have to learn how to hit the intermediate angle on shooting," says Robert Trevellyan. "Move the joystick to the side in between pressing the button to release the ball and the ball leaving the player's hand."

GO FOR THE LEAGUE

■ As well as rewarding a win or draw, a league point is awarded for every ten points scored in a match so a good performance against a poorer team can give you a good position. "You have a better chance to win the league than the cup if only because one loss and you're out in the knockout," says Robert. "I never won the cup."

STAR ATTACKS

■ Getting goals isn't easy but getting stars are, so make your way to the sides of the pitch and hurl away for points. Get all the stars and bank the points.

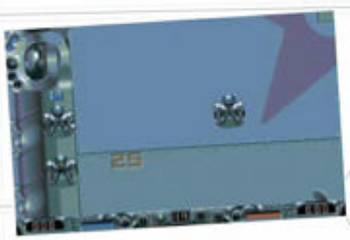


HEAD FOR THE MULTIPLIER

■ The best way to get a good lead is to ensure that every point you gain is optimised. The only way of doing that is by throwing balls into the multiplier early on.

GRAB THE TOKENS

■ Tokens affect the whole team and lasts six seconds. Freeze team tokens halt opponents, reduce team tokens lower opponent attributes, goal doors prevent goal scoring, grab ball gives you possession.



HANG AROUND

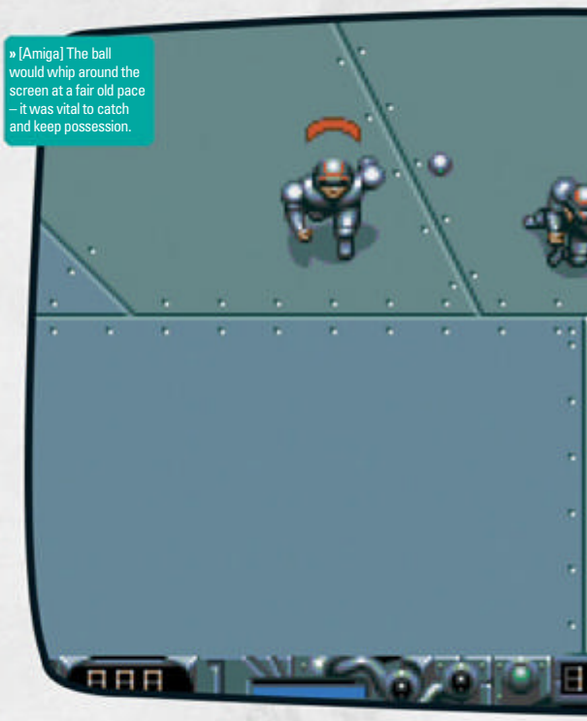
■ You should aim to linger around the multiplier and see off challenges with a few punches. Should the opposition attempt to cancel your multiples, quickly get the ball away.

USE THE BOUNCE DOWNS

■ "You have got to watch your timing and go for the bounce downs and the electrobounce – even if the electro ball runs out, you still have a chance of winning because the goalies cannot normally get to it in time and it confuses the player." Sound advice from Mike.

BUY QUALITY

■ Playing the game on the original hardware? "You have to be fast and you need to have a high quality joystick," says Robert. "You'll destroy any poor-quality joystick."



» [Amiga] The ball would whip around the screen at a fair old pace – it was vital to catch and keep possession.

When no lights were lit, a goal would be worth ten points, when one light was lit, it would be worth 15 and when two lights were lit, goals were worth an impressive 20 points. To the side of the multipliers were a series of five stars. When these were hit by the ball, they would give the player two points. But if a multiplier light was lit, that would increase to three points and if two lights were turned on, it would lead to four points. "Although the idea for this all of this was most likely thought out at the start by Eric, I don't remember the nuances of the scoring system being laid out in detail," says Robert, struggling to recall the exact timings. "A lot developed along the way."

And develop it did, with players quickly realising the true complexity that lay behind the waypoints were earned. Players who managed to get all five stars, for instance, would receive a bonus of ten points but if a multiplier light was on, that would increase to 15 and, if two were on, it would see a return of 20. Still, that wasn't it, though. In between the centre spot and the goals were bounce domes. When these were hit, the ball would fly away and lead to scores of two, three or four depending on the multiplier's status at the time.

The multiplier was also used in conjunction with the 'electrobounce', a feature that was placed further along the wall from the sets of stars. It would give the ball an electric charge that would only wear off when the ball became still or the opposition gained possession. When the ball was charged, players who tried to pick it up would be automatically tackled. The number of tackles would depend – you guessed it – on the number of lights that were lit up on the multiplier.

"The basic scoring methods and warp gates were inspired by *Pro-Pinball*," laughs Mike. "In fact, a lot is based on a pinball machine really. We just thought it would be a good idea to do something different and to say this is not a football game. We wanted something that had virtually no rules with a scoring mechanism that would let you boost your points which is where the multiplier and bounce domes came in. Part of

> **"We were squeezing everything that we could out of these machines; pushing the hardware to the limits"** Robert Trevelllyan

actually winning in *Speedball 2* wasn't down to scoring goals but using the features to the best advantage."

That was certainly true. One hit on a bounce dome at the right time could give a player all the advantage needed to win a match. "In football, you may get a corner and you need to score off of it," Mike explains. "In *Speedball*, you could be in a tight position with a few seconds left, go for a bounce dome and bang, you've won the game. It's what made the game exciting and it's why people still play it. I mean, two years ago I was on the Underground in London, and two guys were talking about *Speedball 2* on the Amiga and it was, like, f**k! I would have told them that I made the game but it was too packed and I had to get off, but I heard this conversation and it was, like, f**king hell, people still talk very passionately about it."

And yet that is only half of the story when it comes to the gameplay. While players could head for the multiplier and attempt to boost their points tally, the opposing team was able to turn the lights off and wipe away any hard-fought for advantage. The only real way to prevent the opposing team from getting the upper hand was – as in the first game – to get stuck in. As a result, *Speedball 2* was a tough, physical on-screen sport and there were a great many pixelated casualties.

But suggest that it was a violent game and Mike is quick to jump in. "There was no violence in the game at all. It was how you perceived it," he says. "There was no blood and there was no gore. It was up to the player whether they felt it was violent or not. And that was intentional." Still, the game was very much about tackling opposing players head on, ramming them out of the way and gaining possession. What's more, ten points were awarded for every opponent who had to be carried off. In such circumstances, little mechanical droids would enter the field of play with their sirens and lights flashing before picking up the poor soul and taking him away for treatment.

This animation was one of a number of graphical flourishes placed in the game by Dan Malone, a talented artist who also worked on many other games for The Bitmap Brothers including *The Chaos Engine*, *Cadaver* and *Z*. He began working in the industry when his preferred early career path drawing comic strips floundered due to a lack of work but his loss to comics at the time was certainly gaming's gain.

"Dan Malone brought a lot of expertise in games to *Speedball 2* and he did an excellent job," says Mike. "That's not to put Mark Coleman down – he was working on *Gods* and that game has superb graphics. The Bitmap Brothers was expanding at this time, and we were working on more games so we wanted a bigger pool of talent. It was a natural progression and we were also striving to be the best and to get better each time. With *Speedball 2*, we had the right sound effects, programmers, music and art and the package as a whole was what made it special."

As always with a Bitmap game, the team spent much time on polishing it. "The Bitmap philosophy was that a game would be finished when it was finished and so it meant many days getting it right," says Robert. "It drove me nuts but that's how they built their reputation. We also wore out an enormous number of joysticks on the game – it was punishing it on joysticks and would make the wrist hurt."

This all combined to make a smash hit game upon which critics lavished praise. "We weren't surprised by that," says Mike. "It's a better game than the original and it was also the first two-player to hit the mass market that worked – give or take *Pong* as the first." It was also as perfect a rendition of *Speedball* as it would ever get. "*Speedball 2* was a good game and it was hard to beat. We were very proud of it." ✱

GAME ON

More sports game with a heavy sci-fi influence to discover

SKATEBALL

■ *Speedball 2* is often claimed to have been inspired by the movie *Rollerball* but Mike denies it. *Skateball*, on the other hand, most likely was. As an ultra-violent futuristic version of ice hockey mixed with football, the matches could be won by destroying the opposition, or by scoring five goals.

CYBERBALL

■ In 2022, American football is played by well-armoured robots controlled from a safe distance by humans. Or at least that is the premise of Atari's *Cyberball*, a vertically-scrolling game in which you score a touchdown by carrying the ball across the end zone while dealing with an explosive ball.

KILLERBALL

■ Chucking together roller-skating and American football, *Killerball* is a five-a-side blast which became another of gaming history's cruel titles when it was released in 1989. Players can muscle the ball off the opposition by flattening them to the ground before trying to push the ball into stupidly small holes in the wall.

SUPER BASEBALL 2020

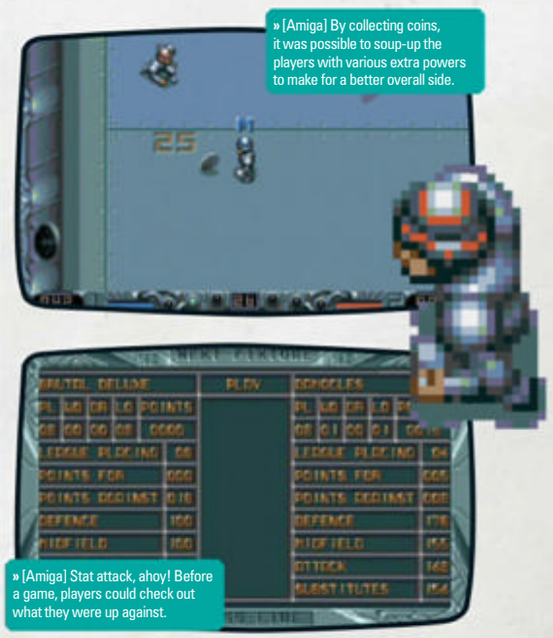
■ While this game has baseball's traditional rules at its core, the Cyber Egg Stadium and presence of robot players ensures it's anything but a contemporary riff on the sport. As well as the use of violence and land mines, money rules: good play is rewarded by cash that can be spent on upgrades.

BILL LAIMBEER'S COMBAT BASKETBALL

■ The NBA's website says Bill Laimbeer was "one of the most notorious players ever to throw an elbow," but he used his reputation to his advantage in this game. Set in 2030, Bill has decided to chuck out the rulebook. As the name suggests, a violence is the key to winning.

DEATHROW

■ Showing that violent, futuristic sports games were not a thing of the past (ironically enough), *Deathrow* became a welcome addition to the genre upon its release as an Xbox exclusive in 2002. With players fighting their way to try to get a glowing disc through a hoop, the game has proven to be furiously fast and fun.



» [Amiga] By collecting coins, it was possible to soup-up the players with various extra powers to make for a better overall side.

» [Amiga] Stat attack, ahoy! Before a game, players could check out what they were up against.

Future Classic

Modern games you'll still be playing in years to come

INFO

- **Featured System:** PS4
- **Year:** 2012
- **Publisher:** Polytron Corporation
- **Developer:** Microsoft Studios
- **Key People:** Phil Fish (designer), Renaud Bedard (programming), Rich Vreeland (music)

GO DEEPER

- ***Fez*** **has its own in-game alphabet, which you can decode a lot easier if you find the cipher...**
- **Some of the background music in the game changes key depending on what time of day it is.**

»[PS4] *Fez* has a day/night cycle, which is incorporated into some of the puzzles. It also creates some glorious sunrises/sunsets.

48. FEZ

This pixel puzzler sprung to life in 2012, challenging our perceptions and straining our brains. Peaceful, stunning, yet fiendishly clever, Fez has a perfect blend of exploration, platforming, and puzzle-solving

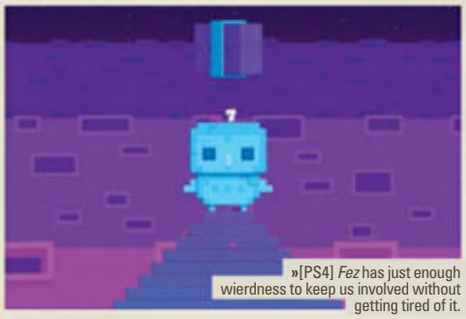
THE BACKGROUND

Fez has had one of the most exposed development cycles of any indie game, due to its in-depth development log on TIGsource, the prominence of designer Phil Fish on social media, and being featured heavily in the behind-the-scenes documentary *Indie Game: The Movie*. The trials and tribulations behind this startlingly successful indie puzzle-platformer, including technical, legal, and creative frustrations, became public, pushing *Fez* and Phil Fish into a spotlight at the time that neither would be able to retreat from.

But despite the painful process of bringing it to release, the long development time, several iterations, and its other creator, Shawn McGrath, leaving the project, *Fez* finally made it to XBLA in 2012. With clear inspirations from *Cave Story*, *Zelda*, *Ico*, and any number of retro games, *Fez* was undeniably something different, taking all of those and more and creating something unique. Though Phill had worked on the games, *Glee.* and *Super Hypercube* through gaming collective, Kokoromi, this was by far the biggest project he had undertaken. It gained an incredible amount of publicity, winning several awards before it had even been released. Anticipation was extremely high, but we think this is one of those rare cases where it's justified. *Fez* is a masterclass in platforming and puzzling ingenuity, set in a gorgeous pixel art world.

THE GAME

Fez itself is a mightily odd game. A 2D platformer in a 3D world? What? Still, being retro gamers, we're used to the stranger side of life. Hands up everyone who enjoyed pretending to be a paper boy? Or a little orange creature comprised of mostly a head, a nose and profanity? Hell, even a little round yellow circle trapped in a maze. *Pac-Man* eats the pills and runs away from ghosts because that's just what he does. So it's clear to see that *Fez* draws heavily on retro gaming, not just in its pixel art aesthetic – which is certainly a powerful part of why this game is so enthralling – but in its attitude of acceptance. Just go with it. Embrace the creativity. No, there aren't any enemies to fight. There isn't really a bad guy, either. Yes, you're a little white dude in a red fez, the world is destroying itself, and you have to find cubes to fix it.



»[PS4] *Fez* has just enough wierdness to keep us involved without getting tired of it.

»[PS4] The moment when the world first changes to 3D is amazing, shattering your ideas of what you thought the game was going to be.

Don't ask why and don't think about it. You're going to need your brain elsewhere to work out some of these devilish puzzles if you want to find all the cubes.

Of course, that task starts off pretty easy, although it requires mastery of the game's core mechanic. Swivel the world with your power to see a whole different side of life. What you once thought was a 2D plane now shows itself to be three-dimensional. Of course our hero, Gomez still travels in 2D, but in giving you the ability to rotate the world around him while he stays in the same place, *Fez* gives you four perspectives at any given point. If this sounds bizarre, that's because it is. But it's also easy to get the hang of, and its much more of a hands-on experience than something that can be described without tripping over dimensions. *Fez* not only provides some platforming excellence with this mechanic, but uses it as part of the solution to many of its puzzles.

You'll find yourself returning to previous areas as *Fez* has some clever little devices to keep the completionist in you coming back. There are larger hub worlds in *Fez*, with smaller individual rooms leading off from these, and on your world map you will see the outline of these areas both large and small turn gold as you find all the secrets in them. And of course you'll have a favourite section. In a mellow mood, we favour the giant mushrooms of the chilled-out woods; when we're feeling dark and moody, it's the graveyard crackling with lightning that illuminates hidden platforms that really captures our interest. Not only are the puzzle and platforming elements engaging, but the world is so inviting, Gomez is somehow such a captivating character, despite saying nothing. Moving through these different areas and discovering new worlds within worlds is an absolute delight. It's this sense of holistic cohesion that really sets *Fez* apart from so many other games.

WHY IT'S A FUTURE CLASSIC

Not only is there nothing else out there like *Fez*, but there's been nothing that uses these mechanics while giving as much attention to its world. And while it's easy to get swept up in this dream-like world, *Fez* has a lot more going on that speaks to us on a more deeper level than simply wanting to feel good at a game.

Fez is a power fantasy, but not one that relies on weapons and violence to save this world on the brink of collapse. Not that there's anything wrong with those fantasies, we love a good shoot-'em-up, but they're incredibly common. *Fez* stands out by recognising that all of us want to feel like the hero, but that sometimes a peaceful solution is required. We look at the world around us and see it turning into something we don't understand. And where, in our day-to-day lives, we might be powerless to change certain things, the everlasting appeal of *Fez* is that you *can* solve the puzzles, but more than that, those puzzles are part of a much greater deed, and one that you take on simply because it needs to be done, because you are a good person in a dark world. Its timeless appeal along with the beauty of the art and music and the challenge of the puzzles, keeps us returning to *Fez*.

Things of note

LISTEN TO THIS

Rich Vreeland's chiptune soundtrack to *Fez* is beautiful, using synths and all kinds of electronic cleverness to produce a sublimely layered glitchtrip wonder.

MENTAL CHALLENGES

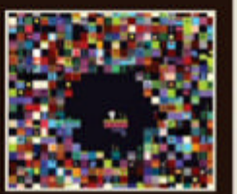
Its obvious a lot of time went into the puzzles. It feels great when you crack the codes, but for the love of Darran Jones, don't use a guide.

"YOU SPIN ME RIGHT ROUND"

The unique way that Gomez travels in his 2D/3D world is perfect for exploration. It's a joy to enter a new location and search for its secrets.

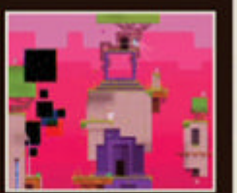
I'M JUST MESSING WITH YOU

Fez doesn't just have a fascinating world to explore and fun puzzles to solve, it also takes delight in messing with your mind.



LOOKING SHARP

On completion of the game, Gomez will get a pair of sunglasses. We won't spoil it for you, but needless to say they're a game-changer in terms of mechanics.



»[PS4] The condensed style to the locations was a very deliberate design choice on the part of Phil Fish, who stripped it back to its vital elements.

»[PS4] This little sparkly guy is a *little* like Navi, but don't let that put you off...

»[PS4] Little cubes will send out a ping when you're in their location.

KUNG-FU MASTER

Kung-Fu Fighting – is it as fast as lightning? Originating in the late Sixties and then exploding throughout the Seventies, mainly thanks to the cinematic career of Bruce Lee, this martial arts phenomenon was firmly mainstream by the next decade. Graeme Mason takes a look back at the scrolling fighter that established a genre…

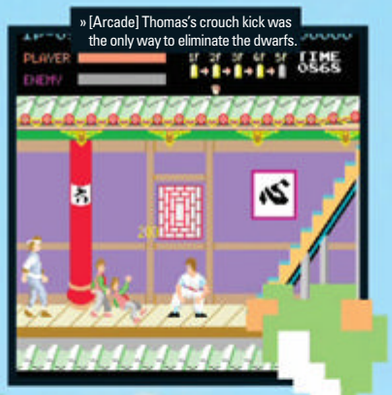
Like *Commando* (Ultimate Guide, Retro Gamer 138), *Kung-Fu Master* took its themes from contemporary and Seventies cinema. And in a sense, despite the disparity of methods, the genres of Kung-Fu and action were quite similar: one man versus an army, only instead of being tooled up with machine guns and other various weaponry, the hero uses nothing but his own fists, feet and cunning. No doubt influenced by the famous Bruce Lee flicks *Enter The Dragon* and *Game Of Death*, *Kung-Fu Master* also had the fortunate coincidence of being released in arcades just around the same time as the blockbuster cinematic hit, *The Karate Kid*.

Yet despite the relative high power of arcade games of the time, they all still needed that elusive element required of all videogames: playability, and *Kung-Fu Master* had more than enough of this 'X-factor' than you could shake a chopstick at. The game tells the tale of Thomas, the titular martial arts master; one day, while taking a pleasant afternoon stroll with his girlfriend, Silvia, Thomas is briefly distracted and several henchman appear and abduct his lover. Later, he finds a note stating that Silvia has been kidnapped by the mysterious crime boss, Mr. X, for reasons unknown. The sombre missive lays down a challenge, as if this is all simply a test for the hero. "If you want to save your dear Silvia's life," it reads ominously, "come to the devil's temple at once." Of course, a legion of henchmen and special bosses await Thomas, or as the note explains mysteriously: "Five sons of the devil will entertain you."

Kung-Fu Master was the idea of designer Takashi Nishiyama. Often credited in creating fellow classic arcade game, *Moon Patrol*, Nishiyama would go on to have a hand in another famous beat-'em-up, *Street Fighter*. For *Kung-Fu Master*, however, ▶

PIXEL PERFECT

Just a few of the things you'll meet in Kung-Fu Master



» [Arcade] Thomas's crouch kick was the only way to eliminate the dwarfs.

HOW TO PLAY

POISONOUS MOTHS

■ These lepidopterans appear on level four, swarming out from holes in the walls. Defeating them requires a different move depending on their position. It's better to rush past them; once they're behind Thomas they don't represent much of a threat.

DRAGON SMOKE

■ Level two quickly ramps up the difficulty, and about to form from this vertical column of smoke is a colourful dragon. The dragons breathe deadly fire at head height so it can easily be avoided. If Thomas is quick enough, he can rush past the static lizard, rendering it virtually harmless.

EXPLODING BALL

■ These piñata-style balls are as nefarious and deadly as they are colourful. They hover for a few seconds before unleashing three bolts: one directly down and one each side. If you get caught near one of these, duck just to the left or right of it and they should all pass Thomas harmlessly by.

FLYING KICK

■ Thomas' badass flying kick can take out multiple bad guys at once, the result of which is a sweet bonus. However, by the latter levels, Thomas takes too much time to land and recover his poise, meaning its best to utilise this move earlier on in the game where the enemies are much easier.

THUG HOLDS

■ The standard thugs don't pose much of a threat alone, but come level five you'll be cursing the faceless hoodlums. You are only able to escape from their grip by wiggling the joystick frantically left and right; the more grippers on Thomas, the quicker his energy falls.

KNIFE THROWERS

■ There's a little trick with the knife throwers: should one happen to be behind Thomas, it reduces the amount of enemies who mass in front of him. Try stringing the knife thrower along for as long as possible (avoiding his knives) and it can make progress much easier and quicker.

LONE THUG

■ The first level is a good time for Thomas to show off some of his skills. Its also a good time for you to get familiar with Thomas' moves. Try some punches and flying kicks for those all-important extra points; get three thugs in a row with a flying kick and earn a neat score bonus.

PUNCHING

■ Punching enemies earns a nifty double points bonus. But it's a considerable risk thanks to its incredibly limited range; careful timing is required for Thomas' fists of fury. However, utilising your punches is a useful variation for many of the boss fights.

PUNCHING KNIFE THROWER

■ The symbols on several pillars actually mark Thomas's progress through a level. Ordered from one to six, this one shows our hero is at stage four of the level and he celebrates by punching a knife-thrower in the face.

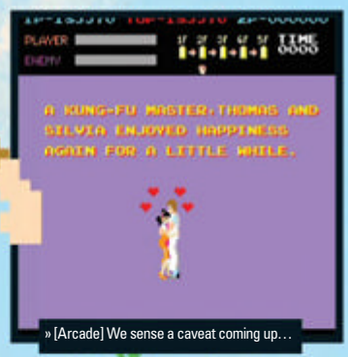
DWARVES

■ By level two the regular thugs and knife-throwers will be complemented with this, ahem, vertically-challenged type of villain. The standard kick and punch are out and you need to quickly learn how to duck, fight and walk in quick succession.

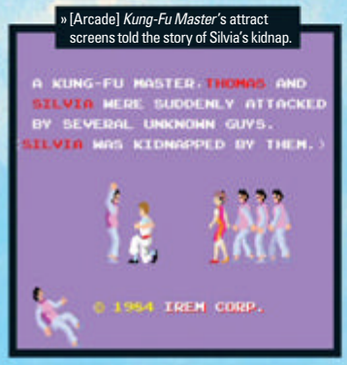
» [Arcade] A dragon's breath deals loads of damage to Thomas.

▶ influenced heavily by the Bruce Lee movies mentioned earlier, Nishiyama devised a system where the lone hero would take on an incessant and varied band of villains, with the game (loosely) tied into a Jackie Chan film called *Spartan X*, or *Wheels On Meals* for western audiences. In the movie, Jackie plays one half of a pair of cousins running a fast food business. Both cousins are entranced by a girl named Sylvia who also happens to be a pickpocket. When Sylvia is kidnapped by a gang (because she's the heir to a large inheritance), the cousins and a private investigator all trot off to the villain's castle and punch and kick their way to Sylvia in the traditional style.

Kung-Fu Master was set apart from its peers by the scrolling, speed – there was to be no mass of moves (or blocking) – and considered tactical approach similar to Data East's *Karate Champ*. It was all about pace, and efficient, enemy-despatching strikes, with our hero required to counter an awkward time limit and a horde of evil henchmen. The game scrolled alternatively to the left and right as Thomas made his way up the temple, and at the end of each floor he came face to face with one of those despicable 'five sons of the devil'; kill the boss and it was up to the next floor. Lying in wait for Thomas were not only the five sons, but



» [Arcade] We sense a caveat coming up…


A KUNG-FU MASTER, THOMAS AND
SILVIA WERE SUDDENLY ATTACKED
BY SEVERAL UNKNOWN GUYS.
SILVIA WAS KIDNAPPED BY THEM.
© 1984 IREM CORP.

» [Arcade] *Kung-Fu Master*'s attract screens told the story of Silvia's kidnap.

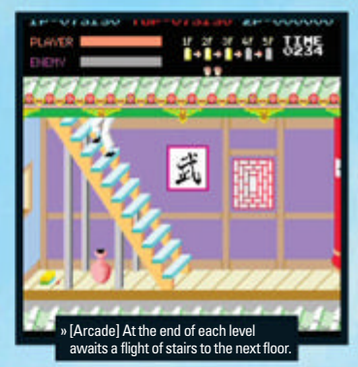
knife-throwing villains, vicious dwarfs, killer dragons, exploding lanterns and poisonous moths. Thomas' mastery would be tested to breaking point. As well as the time limit, that made sure the player was unable to rack up points by lurking around on the easier levels, *Kung-Fu Master* also had a fun risk/reward mechanic. Thomas is able to perform flying kicks and punches in addition to his waist-high kick. He gets more points for these moves than with the standard kick, but there's a drawback: the punch doesn't have as much range, increasing the risk of one of the enemies grabbing Thomas and sapping his energy, while the flying kick is difficult to time and leaves the hero open to attack for a brief moment as he lands.

Kung-Fu Master was a well-loved title in arcades which made home conversions inevitable. It proved most popular on the Nintendo Famicom (NES) where it was released in Japan under the title of *Spartan X*, and became one of the biggest selling titles on the console in 1985. Irem licensed the Western conversions to Data East who in turn licensed the game to publishers such as US Gold for the European-based versions, while Activision published the game on the Atari 2600 and 7800. The conversions varied in quality with many home systems unable to handle the fast pace of the game, despite its relatively plain graphics. The main European versions from US Gold were particularly over-hyped, and, in the end, they disappointed many fighting fans.

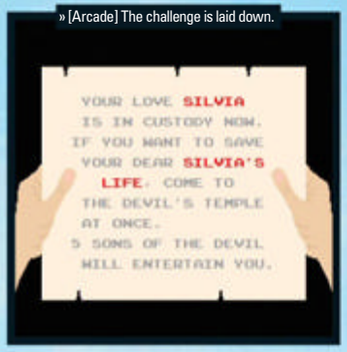
"Kung-Fu Master was set apart from its peers by the scrolling and speed."

Somewhat strangely, *Kung-Fu Master* did not receive an official western sequel, although Irem's 1989 arcade hit, *Vigilante*, is regarded as a spiritual follow-up. *Spartan X 2* did appear on the Famicom in 1991, but it was no more than a retread of the first game, and the game shifted its plot to fall more in line with the Jackie Chan movie. Having transferred to Capcom to work on *Street Fighter*, Nishiyama moved to SNK where he is credited with creating more legendary beat-'em-up series such as the *Art Of Fighting* and *Fatal Fury*. Back at Irem, however, *Vigilante* ruled, as did Irem's renowned shooter, *R-Type*.

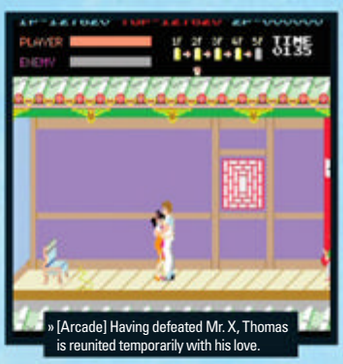
But today *Kung-Fu Master* remains not only a high-kicking playable game, but it can also can lay claim to several ground-breaking elements that influenced many future genre hits. Before *Kung-Fu Master*, fighting games were almost exclusively single-screen with the player facing a lone opponent, usually of similar ability and strength. Irem's hit introduced not only a scrolling environment, but also multiple weaker enemies that represented little threat individually, however, they were highly dangerous in groups or in a combination of types. Later games such as *Double Dragon* (1987) owe a debt to *Kung-Fu Master*, without Thomas there would have been no urban vigilantes, or those vengeful Lee brothers. In essence, few games can claim to have invented a genre such as *Kung-Fu Master* did with the brawler, a term coined for a game where one person fights against a seemingly-endless stream of enemies.



» [Arcade] At the end of each level awaits a flight of stairs to the next floor.



» [Arcade] The challenge is laid down.



» [Arcade] Having defeated Mr. X, Thomas is reunited temporarily with his love.

BOSS RUSH

How to defeat those five sons of the devil. Good luck, grasshopper

STICK FIGHTER

■ A tall and slim man, the boss at the end of level one wields a plain club which nevertheless can do significant damage to Thomas.

HOW TO BEAT: Back him into the stairs and alternate between the crouch and jump kicks while watching carefully for his attacks. Beware though: after you've beaten the game once, this boss will gain an extra 'middle' attack.

BOOMERANG FIGHTER

■ He may not be antipodean, but he is extremely handy with a boomerang or two, and damn, does that bloody thing sting when it hits you.

HOW TO BEAT: He will throw his boomerangs as soon as Thomas approaches, so these must be avoided. Then attack as quickly as possible, watching for the return journey of the deadly missiles.

GIANT

■ Literally a giant, this boss dominates the screen and his kicks can kill Thomas in very short order. This guy is a tough one.

HOW TO BEAT: Like Stick Fighter, it helps if you can back the giant against the stairs. Jump kicks are also useful as they do lots of damage and try to keep Thomas away from the giant's powerful kick.

BLACK MAGICIAN

■ Here at **Retro Gamer** we reserve special hatred for this guy. As a black magician, he throws fireballs and casts illusions to fool Thomas.

HOW TO BEAT: Thomas's main hip kick is out as it does no damage to the dark wizard. Try and back the magician up against the stairs and then use multiple crouch attack punches to dispose of him before he can cast too many fireballs.

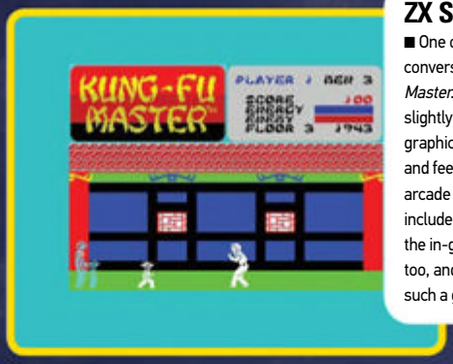
MR. X

■ Here he is, Mr. X. He may not look like much but the gang boss is a skilled fighter and adept at blocking Thomas's attacks.

HOW TO BEAT: You need a lot of skill for this. Mr. X will block the majority of Thomas's attacks so the name of the game is persistence. Watch him closely; whatever move you can anticipate he is about to make, counter with the same attack.

CONVERSION CAPERS

There were numerous ports of Kung-Fu Master, which did you play?

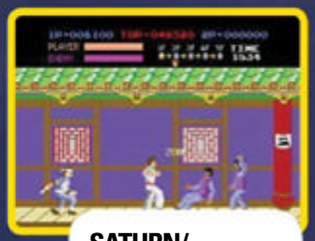


ZX SPECTRUM

■ One of, if not the best, conversions of *Kung-Fu Master*. Other than a slightly squashed feel to the graphics, the game looks and feels very similar to the arcade original and even includes a good rendition of the in-game tunes. It's fast too, and no surprise it was such a good seller.

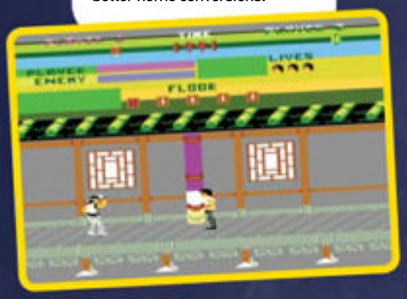
PC WINDOWS

■ As you might expect from a conversion to modern PCs, this version of *Kung-Fu Master*, like the other 17 arcade games featured on this compilation, is arcade perfect.



ATARI 7800

■ Now we're talking speed! Thomas fairly zips across each level in this version with hordes of gripper thugs converging on him, their arms stretched out like a bunch of zombified henchmen. Interestingly, the level one boss is almost a mirror image of Thomas himself, but nonetheless, this is one of the better home conversions.



SATURN/ PLAYSTATION

■ In 1996, Irem released a small Japanese-only compilation entitled Irem Arcade Classics, which consisted of *Kung-Fu Master* and the distinctly less-than-classic *10-Yard Fight* and *Motorace USA*. As you'd expect from a format 13 years down the line, the conversions were nearly arcade perfect.

> **"[Kung-Fu Master] also can lay claim to several ground-breaking elements that influenced many genre hits over the years to come."**

NES

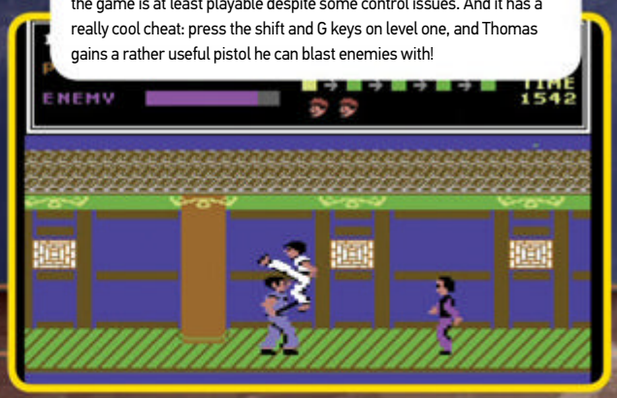
■ Another one of the great conversions of *Kung-Fu Master*. Other than a slightly squashed feel to the graphics, the game looks and feels very similar to the arcade original and even includes a good rendition of the in-game tunes. It's fast too, and no surprise it was such a good seller for Nintendo.

AMSTRAD CPC

■ While its colourful and decent graphics are marred by the Amstrad's squint-inducing scrolling, the CPC does well in emulating the pace of the original. Alas poor collision detection makes the game a bit too frustrating, although, in a rather cool move, Thomas gets to take an elevator instead of the stairs.

COMMODORE 64

■ Unsurprisingly, given its scrolling capabilities, the C64 conversion by US Gold copes well with the speed of *Kung-Fu Master*, in addition to an accurate rendition of the theme tunes and some suitably crunchy sound effects. And while the graphics are a little too much on the chunky side, the game is at least playable despite some control issues. And it has a really cool cheat: press the shift and G keys on level one, and Thomas gains a rather useful pistol he can blast enemies with!



DAN KITCHEN

We chat to developer Dan Kitchen, the man responsible for squeezing Kung-Fu Master into the ancient Atari 2600

How did you get involved with *Kung-Fu Master*?
I was a senior designer at Activision and I had just finished the 2600 version of *Ghostbusters* when they secured the rights to the game.

What was your role?
I wrote the entire game myself including the audio and animations. I had a copy of the arcade machine in my office so that I could make the port as closely as possible on the 2600.

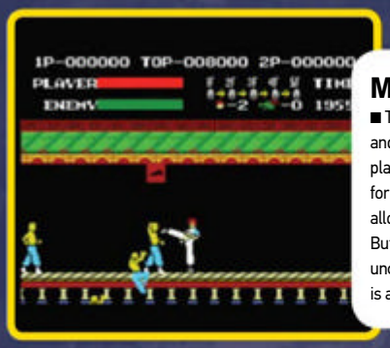
The game wasn't particularly complex even for an arcade game. But what compromises did you need to make?
I knew that I was unable to make the background as detailed as the arcade machine due to the limitations of the 2600, At Activision we always made the backgrounds scroll by single clock elements with players and missiles, basically, so they would scroll pretty smoothly. I also didn't have the extra player to add the falling lanterns.

And there was no jump kick...
Unfortunately I was unable to execute that kick as it appeared in the arcade machine due to the limitation of how wide I could stretch the main character using the 2600 player magnify and shift registers.

What about the controls?
I adapted them by using the joystick button and in conjunction with the joystick directions. By the time I did *Kung-Fu Master* I was an expert at the 2600 architecture.

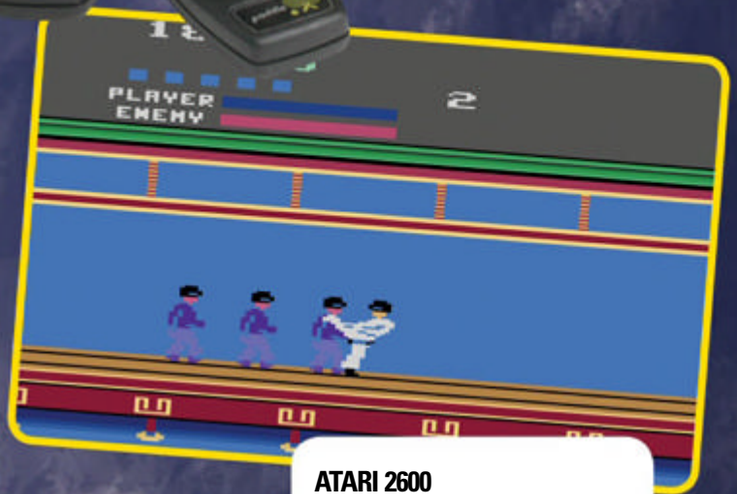
How long did the game take and were you pleased with the end result?
The schedule was tough. I had to get the game done in less than 12 weeks, after doing exactly the same on *Ghostbusters*. But I understand it did about 40,000 units, so given the time and effort I was pleased with the result. I really enjoyed working on the 2600, so I look back fondly on the development of *Kung-Fu Master*.

Our thanks to Dan for his time.



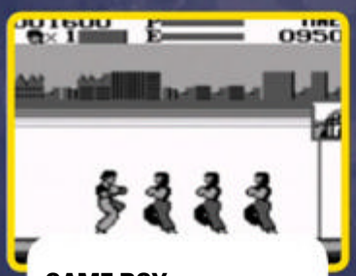
MSX

■ The MSX version boasts colourful and well defined sprites, albeit against a plain black background. The hit detection for Thomas' attacks is a little looser, allowing for a more playable experience. But the main character trots slowly and unconvincingly, soon ensuring every level is a real chore. Close, but no chopsticks.



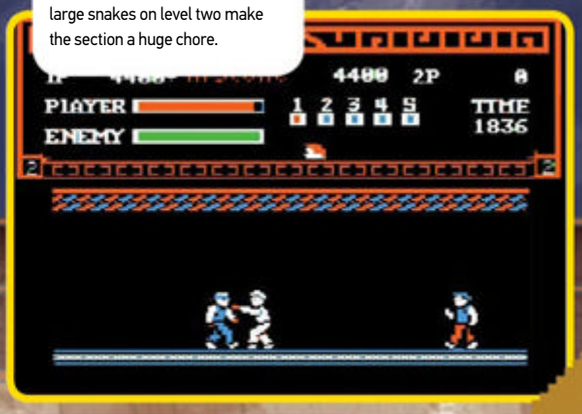
APPLE II

■ Devoid of any background whatsoever, the Apple II version is also almost soundless, save a couple of beepy tunes here and there. Gameplay is mixed; the speed is admirable, but some large snakes on level two make the section a huge chore.



GAME BOY

■ Despite being an excellent game, the Game Boy version of *Kung-Fu Master* bears very little resemblance to its arcade forebear. Thomas is thrown into a number of urban environments and also can pick up energy and power bonuses. It's quite nice to play, if a touch on the easy side.



ATARI 2600

■ An incredibly brave conversion and also a pretty commendable one considering the limitations of the hardware. There are naturally a host of graphical and gameplay compromises (see boxout interview with Dan Kitchen), but at least the game moves at a fair lick.

Minority Report

CLASSIC GAMES YOU'VE NEVER PLAYED

ORIC-1

Alas poor Oric. The 8-bit home computer squared up against the ZX Spectrum but was knocked on its back by the mighty Sinclair machine. As such the Oric is often derided by gamers but it really shouldn't be, as Martyn Carroll discovers…

» [Oric-1] Hit the Zorgon freighter and it drops a rainbow stone for the magic bridge. Still with us?

> "The animation was excellent for the time and better than anything else on the Oric"

ZORGON'S REVENGE

■ DEVELOPER: IJK SOFTWARE ■ YEAR: 1983

■ **THE ORIGINAL ORIC-1** model launched in early 1983 and by the end of the year more than a healthy 160,000 computers had been sold in the UK. Those numbers attracted software publishers and games duly followed.

As was the fashion at the time, most titles were rough and ready versions of classic coin-ops. *Xenon 1* from Blackpool-based IJK Software was clearly moulded on Amstar's *Phoenix*, but it was a clear cut above other arcade clones. The gameplay was fast, the animation was smooth, essentially, the whole thing was polished. Released in July 1983, *Xenon 1* quickly became a ubiquitous purchase for Oric owners. Sales reportedly topped 120,000 copies and a sequel, *Zorgon's Revenge*, naturally followed before the year was out.

Whereas *Xenon 1* was a straight-up shooter designed for quick blasts, *Zorgon's Revenge* was a much more elaborate and involving affair. The game was made up of six delightful scenes that featured a mix of platforming and shooting. In one scene you had to dodge space rocks before leaping up and grabbing onto a magic bird which would fly you to the top of the screen. As you do. In another you had to cross a deadly pit and avoid Incy Wincy Spider. There was also a horizontal shooting section which took visual cues from *Defender*.

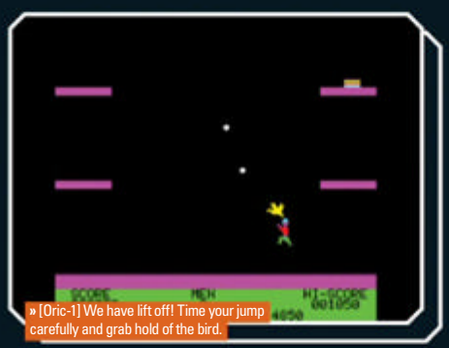
In each of the first four scenes you had to collect a set of special stones which was required in the fifth scene. Here you'd find the entrance to the Zorgon castle where a princess was being held (obviously) and the stones were used to create a bridge over the moat. Once all four stones were in place you could enter the castle and face off against the Zorgon emperor. A successful play-through was no mean feat and that's perhaps the game's only drawback – it was damned hard and you only had three lives.

As with *Xenon 1* the presentation was first rate throughout. The graphics may have been simplistic but the animation was excellent for the time and better than anything else on the Oric. The secret to this success was cross-compiling. Programmer John Sinclair was only 16 when he wrote the *Xenon* games yet he had already written a number of programs for the Tangerine

Microtan 65 (which was the predecessor to the Oric) and the BBC Micro (which needs no introduction). The *Xenon* games were developed on a BBC Micro which was fitted with a Torch disk drive and then cross-assembled to the Oric. This was how John was able to create such polished titles so early in the Oric's life.

Following the release of *Zorgon's Revenge*, John moved over to the Commodore 64 for his best known title, *Rocket Ball*. In 1985 IJK released a third title in the *Xenon* series, *Xenon III: The Genesis Probe*, which was another multi-stage game. It was still very good, and the graphics were great, but it didn't hang together quite as well as the brilliant second game of the series.

All in all though, the *Xenon* trilogy was perfect for Oric owners who were looking for some arcade thrills, and at the time the series was something to show anyone who doubted the computer's gaming credentials.



» [Oric-1] We have lift off! Time your jump carefully and grab hold of the bird.

» [Oric-1] These hydra-style beasties are a nightmare. You have to deflect their fire.

» [Oric-1] The shooting stage is the easiest and probably the most fun.

IN DEPTH

OUR HERO

■ That's you. If you're here it means that you have successfully collected one of the special stones from another stage. You now just need to dodge those dirty birds and reach the bridge.

MAGIC BRIDGE

■ Four separate stones are required to complete the bridge and reach the castle door. You could easily jump the remaining gap, but hey, this is a videogame and those are the rules. Deal with it.

DESTINY'S DOOR

■ Through that very normal looking door awaits the final and most difficult challenge – you versus the Zorgon emperor in a *Donkey Kong*-style climax. Can you defy the odds and save Princess Roz?

PRINCESS IN DISTRESS

■ Your overall mission is to rescue Xenon's Princess Roz from Mr Tickle, or rather the wicked Zorgon emperor. She's imprisoned in the castle so the next step is to get inside.

IF YOU LIKE THIS TRY...

HUNCHBACK II

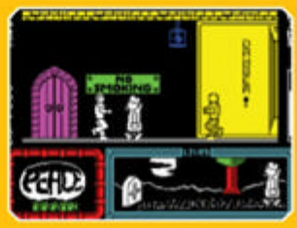
ZX SPECTRUM

■ The original *Hunchback* was released for the Oric, unlike this tricky sequel where each screen offered up an individual platforming challenge (there were only so many ramparts Quasi could jump across). The objective was to collect up all the bells on the way to rescuing Esmeralda. It was short but super hard.

LAZY JONES

COMMODORE 64

■ David Whittaker is best known for his audio skills but this quirky collection of mini-games shows that he was a deft designer and coder too. *Lazy Jones* packed in more than a dozen different games and some were not far off the quality of standalone releases. As you'd expect the soundtrack was top drawer.



AGENT X

ZX SPECTRUM

■ Mastertronic released a number of multi-stage titles of which *Agent X* is probably the best of the bunch. It doesn't compare directly with the other games here as it was a multi-load, but if you wanted a varied challenge and value for money, this was highly recommended. The sequel was decent too.

Minority Report

THE HOBBIT

■ DEVELOPER: MELBOURNE HOUSE ■ YEAR: 1984

■ **This ambitious adaption of Tolkien's tale was released for most 8-bit computers, yet the Oric version was far from a given.** According to Paul Kaufman, managing director of official Oric software label Tansoft, Melbourne House had to be convinced that an Oric version was a good idea. Ultimately it was a win all round, as the game was a strong seller for Melbourne House and provided Tansoft with much needed credibility, opening doors to other software houses. Oric owners also benefitted, of course, in that their machine received one of the most popular and celebrated adventure games of the era.

The Oric version required 48K of RAM and included the game's crude yet charismatic location graphics (by comparison the original BBC Micro release was a text-only affair). However, not all of the graphics were included and those that were took a painfully long time to be sketched on screen. Thankfully the famously advanced 'Inglish' parser ran at a decent speed, allowing you to forge ahead on your quest to snare Smaug's hoard. Along the way you'd encounter obscure puzzles, unpredictable NPCs and other oddities (bugs), but it's impossible to deny the simple pleasure of exploring Middle-earth on a merry quest for treasure.

> "The Oric version required 40K of RAM and included the game's charimastic location graphics"

» [Oric-1] The location graphics were similar to other tape-based versions of *The Hobbit* only with less colour.

» [Oric-1] Your quest begins – and ends – in Bilbo's cosy home at Bag End.

» [Oric-1] Getting stuck in the dreaded goblin's dungeon was a gaming right of passage.

MORE GAMES TO PLAY

» LORDS OF TIME

■ DEVELOPER: LEVEL 9
■ YEAR: 1983

■ **Level 9 released** several of its early titles for the Oric, including their original adventure trilogy and the sci-fi outing *Snowball*. *Lords Of Time* was a classic fantasy adventure in which you travelled to various eras in history by means of an odd grandfather clock that doubled as time machine. This was released before Level 9 added graphics to its games so it was text-only, but that didn't detract from this fine work of interactive fiction.

» THE ULTRA

■ DEVELOPER: PSS
■ YEAR: 1983

■ **Just like the** Spectrum, the Oric was available with either 16K of RAM or 48K. Most of the best games required the bigger memory machine but *The Ultra* was one of the exceptions, offering up 16 waves of action in just 16K. Each wave featured unique enemies with their own attack patterns so the game wasn't as repetitive as many similar shooters. A 48K sequel, *The Hellion*, increased the number of waves to 101!

» DEFENCE FORCE

■ DEVELOPER: ANDREW MOORE
■ YEAR: 1983

■ **The best titles** from the arcade's golden age were all present on the Oric, albeit unofficially. This was a version of Williams' *Defender* that brilliantly replicated the classic coin-op, resulting in probably the best shoot-'em-up available for the system. It played, looked and sounded just right. Interesting fact: author Andrew Moore has done well in life. He moved to the US in the Nineties and is now a vice president at Google.

» DON'T PRESS THE LETTER Q

■ DEVELOPER: ANDREW MOORE
■ YEAR: 1984

■ **Essentially a primitive** version of *WarioWare*, this Oric exclusive featured dozens of mini-games and you would play each one in quick succession. Many of the games were similar, involving maze and platform elements, and the graphics were pretty basic, but this was easily one of the most enjoyable titles available for the Oric.

L'AIGLE D'OR

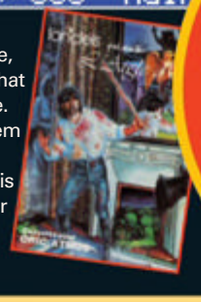
■ DEVELOPER: LORICIEL ■ YEAR: 1984

■ **THE ORIC WAS big in France – it was the country's best-selling computer in 1983.** French developer Loriciel was one of the Oric's biggest supporters, releasing more than 70 titles for the machine (including an early effort from Eric Chahi who would later create 16-bit hit *Another World*). *L'Aigle d'Or* (*The Golden Eagle*) was the standout title from the firm's formative years and it debuted on the Oric before being ported to other machines including the Amstrad CPC.

The game was a visual treat, from the lurid inlay art (which wouldn't look out of place on the cover of a video nasty) to the game's intro showing a foreboding castle lit up by lightning. You had to explore the castle's trap-laden rooms, which were depicted in pseudo-3D, and solve various puzzles in order to obtain the artefact of the title. Unfortunately the main character was poorly animated and lacking haste, which sapped the enjoyment out of what was an otherwise intriguing adventure. Nowadays it's not so much of a problem as you can emulate the game and double the speed. Plus, if your French is *merde* you can use an online translator to make sense of the text!

» [Oric-1] The large, slow-moving character is like something out of a Don Priestly game.

» [Oric-1] It appears that we've somehow fallen into a dungeon. Zut alors!



RETRO SUNKER

» ISLAND OF DEATH

■ DEVELOPER: OCEAN ■ YEAR: 1983

■ **Behind the fantastic** Bob Wakelin cover-art lay a terrible game that unwisely married arcade and text adventure elements. If only all the quicksand in the game had swallowed the game itself.

» SCUBA DIVE

■ DEVELOPER: DURELL SOFTWARE
■ YEAR: 1984

■ **Durell released several** titles for the Oric (indeed its mega-hit *Harrier Attack* was initially developed for the machine). This version of *Scuba Dive* paled next to the Spectrum original but it nonetheless delivered a decent aquatic adventure – and the whole underwater world was somehow squeezed into 16K, so all Oric owners could enjoy it. With five increasingly complex caverns to explore it wasn't a game you'd finish in a hurry – if at all.

» MANIC MINER

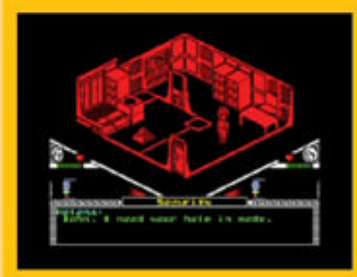
■ DEVELOPER: SOFTWARE PROJECTS
■ YEAR: 1985

■ **Like most machines** the Oric received a version of Matt Smith's classic platformer. While similar to the Spectrum original – albeit with slightly 'squeezed' graphics – a surprise awaited more capable miners. Tucked in between The Sixteenth Cavern and The Warehouse were a total of twelve new screens exclusive to the Oric. These extra caverns gelled well with the originals and one even revived the dreaded Kong Beast for a third time.

» ZIPNZAP

■ DEVELOPER: JONATHAN BRISTOW
■ YEAR: 1998

■ **There's a healthy** homebrew scene on the Oric and that's thanks in a large part to the work of Jonathan Bristow. Arcade puzzler *Zipnzap* was one of his most impressive creations and was used to showcase his three-channel sample tracker software. So the sound was great and it played really well too, and even featured co-op play. He later ported *Stormlord* and *Impossible Mission* to the Oric. Jonathan sadly passed away in 2013.



» SPACE 1999

■ DEVELOPER: CHEMA
■ YEAR: 2009

■ **It would take** more than 25 years for an isometric adventure to appear on the Oric but it was definitely worth the wait. Based on the Seventies sci-fi show, *Space: 1999* showed exactly what the Oric was capable of in the right hands. In short, it was hard to believe that such a technically impressive game could run so well on a 1MHz system. The release also featured a fantastic opening sequence based on the TV show's intro.

CLASSIC MOMENTS

The House Of The Dead 2

» **PLATFORM:** DREAMCAST » **DEVELOPER:** SEGA » **RELEASED:** 1999

There are many satisfying moments that happen when you play Sega's insanely good sequel to *The House Of The Dead*. And why wouldn't there be? After all, Sega filled the game with a huge menagerie of bizarre and dangerous foes that ranged from possessed owls to killer moss men (well, that's what they look like to us). And let us not forget the insane bosses that will test your aim and punish you for sloppy shots. If we had to pick just one amazingly satisfying moment from *The House Of The Dead 2,* however, it would easily be some of the headshots that you are able to pull off. Yes, they're admittedly easy to make happen thanks to your onscreen reticule when playing with a controller (light guns don't work too well with modern monitors unfortunately) but the gooey visceral way in which those undead noggins explode like overripe melons gets us again and again and again.

BIO

Although Sega's *The House Of The Dead* was a very good game, a weak Saturn port meant it failed to garner the attention it deserved. Sega left nothing to chance when it ported its sequel to the powerhouse that was the Dreamcast and the end result was a stunning conversion that not only captured all the magic of the arcade orginal, but actually managed to improve upon it. Several games have followed, including the hilariously silly *The House Of The Dead: OVERKILL*, but none come close to this excellent Dreamcast effort. Perfect proof that style over substance is occasionally more than fine.

MORE CLASSIC THE HOUSE OF THE DEAD 2 MOMENTS

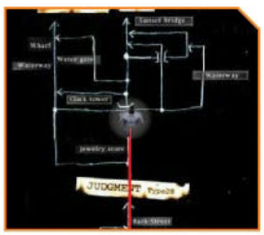
Helping Hand

Throughout your adventure you'll come across a variety of folk who need protecting from the zombie horde. You're typically given only a scant few seconds to help them before they're zombie chow. It's worth doing, though, as in addition to the warm feeling you'll get inside, you'll also typically receive a useful item and raise your overall points multiplier.

Mini-Game Heaven

Sega certainly offered value for money with its great sequel. While there are good boss rush modes and an alternative version of the arcade game, it is the intense training mode with its varied range of missions that offers the best value. Protecting people and using a specific number of shots to kill all enemies are just a few of the many challenges that are on offer.

Choices



Lightgun games often get accused of being too short and being quite light on content. *The House Of The Dead 2* appears to follow this tradition, but you soon notice inviting alleyways that just beg to be explored. It's not until you die and your last steps are reconstructed and mapped out that you realise just how much choice Sega's game actually offers you.

Suffer Like G Did

There is something about the first boss you encounter that sets the tone brilliantly for the chaos that follows. Essentially a big hulking metallic behemoth, you soon realise that the real enemy is actually the tiny little imp that accompanies him. His erratic flight pattern makes him a right bugger to hit, but it feels *so* good when you finally make him eat a few bullets.

AUGMENTED GAMING

_THE DEUS EX STORY

Conspiracies, augmentation and agency abound, Ian Dransfield speaks to the three directors behind the three most ambitious visions of our future ever made into videogame form

Dropped on a jetty in Liberty Island, with the iconic skyline of New York City – presciently missing the World Trade Center – behind you, off you went. After a brief explanation of events from your brother, an awkward sidling past a walking robot of death, and an approach into the grounds of a destroyed and ruined Statue Of Liberty later, you died. Quickly.

Deus Ex was not a game that held your hand. It didn't pause your game every three seconds to explain how to press a button, it threw you into the playground with a few toys, a lot of abilities and the most important mechanic of all: player choice. Some were put off, of course, but those who stuck with it and learned that this was a game ready to reward players for experimenting with a genuinely special experience. One that was initially nothing like it ended up being.

"*Deus Ex* started as a very different concept," explains Warren Spector, director on the game. "When I was at Origin, back in the mid-Nineties, I came up with the idea of doing a 'real world roleplaying game'. I was pretty tired of the way fantasy and sci-fi dominated gaming and wanted to try something different. I came up with a game idea called '*Troubleshooter*'. Basically, you were an ex-CIA guy who gets called in to handle jobs so tough even the CIA can't handle them."

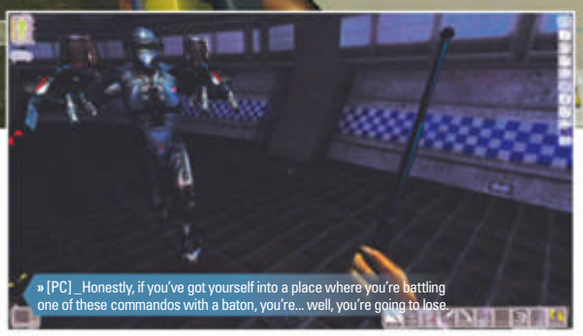
Later on, while working with Looking Glass Studios on *Thief* – which Warren maintains he doesn't deserve as much credit as he gets for his work on it – a question was raised: what if the player wasn't good enough to sneak past a guard? Why couldn't the main character be strong enough to kill a guard to make up for this lack of ability in other areas?

"They told me that wouldn't work," Warren says, "They said if you made Garrett strong enough to fight, no one would ever sneak. I thought they were wrong and set out to make a game that would show them they were wrong. Take *Troubleshooter*, combine it with a little 'prove-the-*Thief*-team-wrong', and then you get *Deus Ex*."

Harvey Smith, now of Arkane Studios, worked as lead designer on

» [PC] _In the future, everyone wears shades indoors. Prescience of wearable technology? Maybe not.

» [PC] _A host of weaponry is available to the player, including old faithful: pepper spray.



» [PC] _Honestly, if you've got yourself into a place where you're battling one of these commandos with a baton, you're... well, you're going to lose.

the original *Deus Ex*. His partnership with Warren is one he still remembers fondly to this day, though he points out work on the game wasn't all smooth sailing. "Making *Deus Ex*, our team was volatile – some people bonded while others clashed. But, regardless of the dynamic, the people on the team were talented and passionate, and we all had the sense that we were working on something electric and appealing – a game that we'd always wanted to play."

The stressful nature of *Deus Ex*'s development is echoed by Warren, though he put at least some of the blame for this atmosphere on himself and his management decisions. "I made some mistakes in structuring the team," he explains, "I mean, two separate design teams in competition with one another? What was I thinking?! Also, the original design was way too ambitious, something the team ultimately convinced me of."

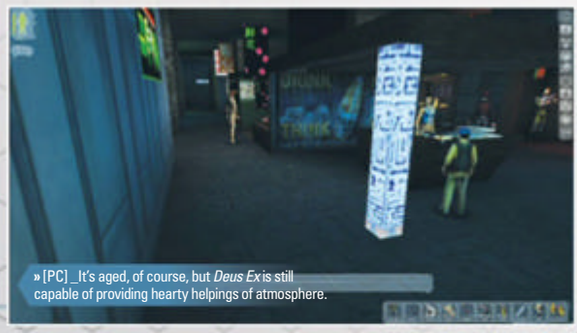
> "I had what I thought was a pretty clear picture in my head of the game I hoped we would make"
> Warren Spector

But once those niggles were worked out, the team solidified and development became a lot easier for the ambitious Ion Storm studio. "Harvey Smith, Chris Norden, Jay Lee and Sheldon Pacotti are the unsung heroes of *Deus Ex*. Working with them was a highlight for me." Warren says, though he adds with a chuckle: "I'm not sure what they'd say about me…"

Regardless of what people thought of one another (and for the record, Harvey states he loved working with Warren), the game that released in 2000 on PC, *Deus Ex*, blew people away – even if it was almost entirely different to what its director had initially intended. "I had what I thought was a pretty clear picture in my head of the game I hoped we would make," Warren explains, "But reality overtakes dreams at some point in the development of a game. Where we ended up was different in every detail from anything I imagined early on, but the feel of the game – the play experience – was spot on. So you could say everything changed and nothing changed, I guess."

You would think that nobody would expect their game to be as influential as *Deus Ex* was – an instant classic, it redefined expectations for what a game *could* be and introduced generations of players to something they simply hadn't experienced before. But Warren admits to some arrogance, "Yes, I thought it would be [very] influential. Or maybe 'hoped' would be a better word," he muses, "I mean, I'm not sure I ever talked with the team about it, but I went into *Deus Ex* wanting to shame other developers. I wanted them to see that you could make a game that was about the player's creativity, not the developers' creativity. I wanted them to feel uncomfortable making old-school RPGs and Shooters."

Harvey, on the other hand, is more reserved in his judgement of what *Deus Ex* would be once work on it was complete. "I remember when we finished the project, Warren and I were just mystified," he explains, "We didn't know how the game would be received. We hoped people would like it, but we were obsessed with its potential flaws. We'd worked a long time on the project, and re-worked parts of the game multiple times. We had an extension when we needed it. We wanted to give players something that would make them feel like our favourite games had made us feel. We hoped *Deus Ex* would be that game."



» [PC] _It's aged, of course, but *Deus Ex* is still capable of providing hearty helpings of atmosphere.

BUILDING A SUPER SOLDIER

_How to create the ultimate JC Denton

INFOLINK
■ The most overlooked augmentation, seeing as you start with it and never upgrade it – but without the infolink, JC Denton wouldn't be able to talk to anybody. Conspiracies would go unchecked.

AQUALUNG
■ Swimming is pretty underrated in *Deus Ex*, but once you have upgraded your lungs to be able to hold more air, you will see why exploring the inky depths is always worth your while.

REGENERATION
■ *Deus Ex* is not a forgiving game, but once you apply the regenerative powers of this particular augmentation, things become at least a tiny bit more friendly to the player.

BALLISTIC PROTECTION
■ While you can get an aug that stops energy weapons from hurting you so much, most people in *Deus Ex* shoot you with traditional guns. Ballistic protection, therefore, is the way to go.

IFF
■ Did you ever wonder why your reticule changes colour for enemies, friendlies or neutrals? The friend-or-foe designation is provided by this valuable little augmentation.

CLOAK
■ Hiding in plain sight, cloak allows you to live out all of your *Predator* fantasies in front of organic enemies. Never forget that robots, turrets, and so on can still see you.

SYNTHETIC HEART
■ Earlier on in the game the synthetic heart is invaluable, effectively increasing the power of all your other augmentations. Later on it is less useful, but we still love you, fake pumper.

MICROFIBRAL MUSCLE
■ When you begin *Deus Ex*, you can't lift much. By the end of it, you can be lobbing massive crates with relative ease – which is both funny *and* useful.

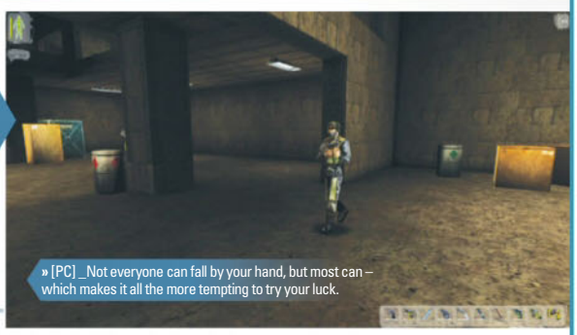
RUN SILENT
■ Another augment suiting the stealthy approach, being able to run silently means you don't have to plod slowly to kosh your target around the back of the head. Bliss.

SPEED ENHANCEMENT
■ This, combined with silent running, means two things: one, a super-quick silent takedown, and two, all of your augmentation energy running out in about a second.

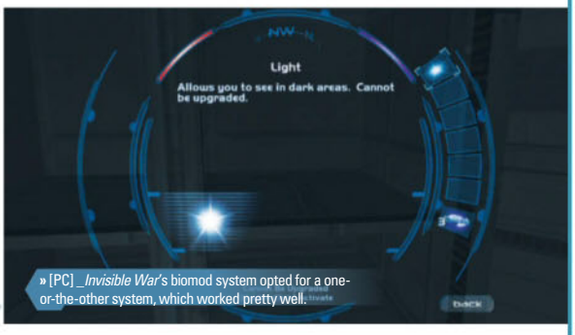
What is surprising about *Deus Ex*'s success, however, is how it still hasn't been bettered. It's rare to even see games hinting at the ambition and creativity contained within Ion Storm's best game – and Warren shares this view. In fact, he takes it a step further. "I think it's pathetic that *Deus Ex* is still as state-of-the-art as it is," he says, "Change out the graphics, fiddle with the UI and leave everything else as is and you'd have something that's *still* state of the art – or close to it. I find it sad that there hasn't been much progress since 2000."

Three years after the success of the original game, the dream team of Warren Spector and Harvey Smith came together again with a much-anticipated sequel. But this was a different world – since *Deus Ex*'s release the game had picked up countless accolades and was cited over and again as being *the* example of forward-thinking gaming; of being the FPS/RPG hybrid that all truly great games should aspire to be like. Whatever the sequel was, it would have to be bloody spectacular.

Regardless of your feelings about *Deus Ex: Invisible War*, it's safe to say it was not bloody spectacular. You'd be hard pressed to find someone calling it plain-old-spectacular. It has its fans, it had its fair share of high marks and it won a fair few awards – but this was not the sequel *Deus Ex* fans craved.



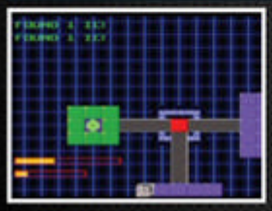
» [PC] _Not everyone can fall by your hand, but most can – which makes it all the more tempting to try your luck.



» [PC] _*Invisible War*'s biomod system opted for a one-or-the-other system, which worked pretty well.

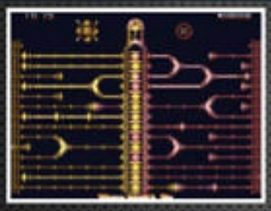
THE HACKING FILES

_The Deus Ex series isn't the only place you can go hacking…



SHADOWRUN

Taking its cyberpunk influences in the direction you'd expect, *Shadowrun* on the SNES featured hacking much like that of *Neuromancer* and its ilk. Using a cyberdeck, the player was taken into cyberspace to battle defences, navigate the network and steal data. It's been done better elsewhere, but no game captured the coolness of hacking, or decking, like *Shadowrun*.



PARADROID

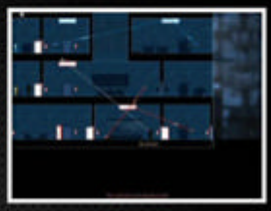
Starting off as a tiny little droid with barely an attack and hardly any armour to speak of, *Paradroid* – and its pictured remake, *Paradroid 90* – required you to hack into other droids in the game. You didn't actually *have* to, but if you didn't you would probably end up very dead, very quickly. The hacking mini-game was simple enough, but against certain 'bots it was nigh-on impossible.

UPLINK

Space year 2010, and you've been hired to hack for the Uplink Corporation. The process in *Uplink* harks back to the, overblown hacking fiestas seen in popular movies of the Eighties and Nineties, meaning it's flashy, click-heavy and fun to take part in. Add to that a brilliant atmosphere, and you've got an amazing hacking game in *Uplink*, even if it's not precisely a 'simulator'.

BIOSHOCK

System Shock 2's hacking meant there was bound to be some in its spiritual successor, *Bioshock*, but nobody really expected it to be a spin-off of *Pipe Mania*. Some players really hated that pipe-rotating distraction, but plenty of people genuinely enjoyed it – sure, it took you out of the experience somewhat, but it was nice to have a break from shooting crazy people in the face with electricity.



GUNPOINT

Proving that there's still an appetite for hacking in this modern world of Anonymous, cloud storage compromises and whatever you call that thing when someone who isn't you uses your Facebook, *Gunpoint* utilised hacking as a core concept to the game. Rewiring doors, lights, alarms and anything else sounded complex, but actually resulted in an intelligent game.

And, in some ways, it wasn't even the sequel its creator wanted to make.

"With *Deus Ex* I had a three game arc planned out. So, in that sense, you could say a second game was always planned," Warren explains. "Having said that, nothing from my original trilogy ended up in the second game, so my plan didn't exactly come to fruition – the team basically came up with stuff they – and I – liked better than my early ideas."

But this sequel was pushed in a different way to the first game – Eidos saw the commercial success of the first game and wanted more, and with it, they wanted to put more eyeballs on the product. An understandable way of thinking, according to Warren – but the move to developing *Invisible War* on both console and PC at the same time was one that caused issues.

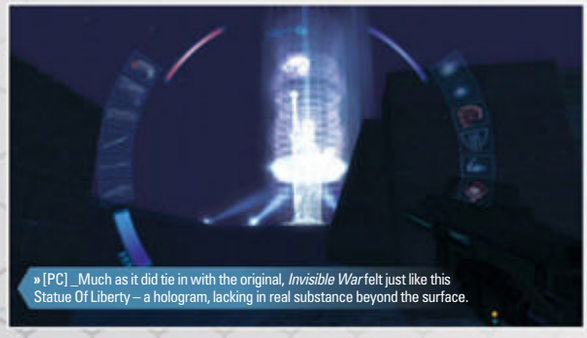
Harvey, moved to the position of director for the sequel, is candid in his appraisal. "We didn't manage the transition from PC to console well," he said, "*Invisible War* suffered from our fumbling of the engine re-work which affected maximum map size, frame-rate, and tools needed by the level design and art teams. We made some bad calls in general, and the game needed a lot more post-production editing."

This time around the project was led by the student, Harvey, with Warren taking a step back – Warren still oversaw the project, mind, and nothing went into *Invisible War* without his approval. Which makes it less surprising to hear Warren isn't as hard on *Invisible War* as his protégé. "I think *Invisible War* had an exceptionally hard act to follow," he explains, "I'm not sure we could have made a game that lived up to everyone's expectations.

"It's worth remembering that one of our goals was to take the *Deus Ex* concept and get it in front of a larger audience. We did that, in part, by ultimately simplifying some game elements. That didn't always work out the way we intended, but it was a worthy effort, I think."

» [PC] _It might have failed in some ways, but *Invisible War* still nailed the setting.

» [PC] _This is what hacking looked like in the second *Deus Ex*. A hands-off experience.

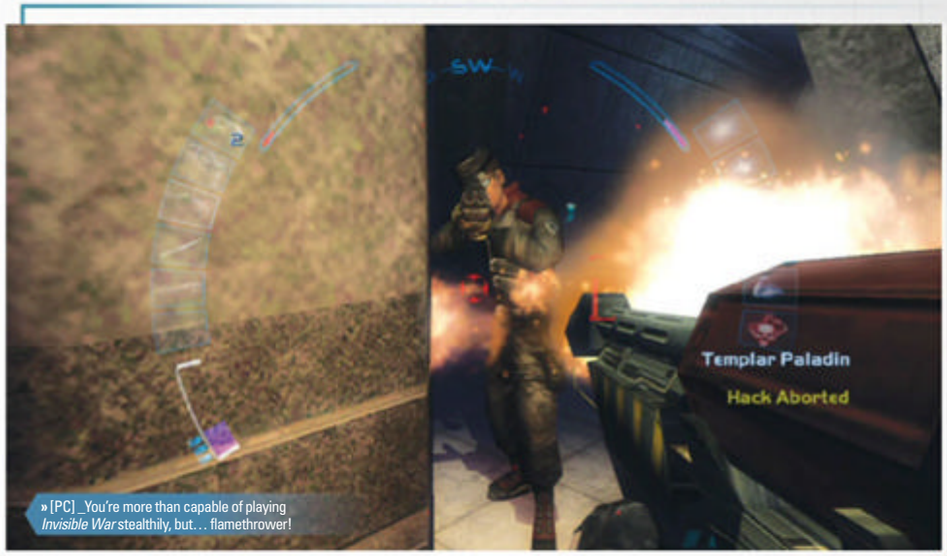


» [PC] _Much as it did tie in with the original, *Invisible War* felt just like this Statue Of Liberty – a hologram, lacking in real substance beyond the surface.

All the same, Warren admits the concerns voiced by a number of players and critics back in 2003 – that *Invisible War* was a game made primarily for console, with its home format of PC taking a back seat. "We were first-time console developers and really considered the PC version as secondary," he says. "We probably would have been better off flipping that and making the PC game we kind of knew how to make while learning about consoles as a secondary platform."

Fortunately this pragmatic view remains for Warren, as he explains: "Does it frustrate? Not really. I mean, I think *Invisible War* was a better game than some people gave it credit for, but that's just one man's opinion." Warren evokes his trademark futurist outlook when talking about the game: "There's little utility in looking back at what might have been. Can't change anything now. Better to look forward than back…"

But we had to push – surely there was something about *Invisible War* that



» [PC] _You're more than capable of playing *Invisible War* stealthily, but… flamethrower!

> It's worth remembering that one of our goals was to take the Deus Ex concept and get it in front of a larger audience
> Warren Spector

Warren would want to tinker with? To excise? To re-fiddle? "Sure," he laughs, "I'd probably not go with unified ammo! And moving the game farther in the future and putting our hero in a purple jumpsuit probably weren't the best ideas. But, again, there's not much to be gained looking back on things that happened so long ago."

For all the negatives – and these really have been left to build up over the years quite unchallenged – there is plenty to like about *Invisible War*. It's a game of solid – if not great – ideas, clever design and a fantastic sense of place hamstrung by technical foibles and a feeling that it was a little rushed out the door. It's not hard to find fans of the sequel, and it's not hard to find voices defending the adventures of Alex D as she/he makes her/his way through another global conspiracy.

Similarly, it's not difficult to get the positives out of the game's creators. "My favourite thing about the game was the fact that we got it on console," Warren admits, "I'd been wanting to try console development for a while. But in terms of the game itself, I was particularly fond of a throwaway thing – the coffee war between Queequeg's and Pequods. For some reason that just made me happy!"

Harvey also has fond memories of *Invisible War*, despite his feelings about the game needing more work. "[I liked] the black market biomods," he says. "Some of the drones, specifically, made for interesting combinations. I remember one play through where I was trying to avoid killing people. I'd tranq-darted a couple of people in a lab, but I also had my health leech drone running. During a big gun battle, the drone disassembled one of the lab techs to heal me. It was a surprise in the good/disturbing sense."

Following the second game's mixed reception, enthusiasm for a third game became muted – but it never disappeared. After a while it became something that *had* to be done; something that could exonerate the *Deus Ex* name and rub out the blemish of *Invisible War*. Ion Storm continued down the path of cybernetics and futurism, with Warren working on pre-production of a third game: *Deus Ex: Insurrection*.

Intended as a prequel and with the player taking on the role of JC Denton's father, *Insurrection* never got very far into its planning phase before Warren left Ion Storm. The project then withered on the vine. Jordan Thomas was the man to step in and try again, with the studio back to the drawing board for another, different *Deus Ex 3* under his stewardship.

» [PC] _It's safe to say, *Invisible War* went somewhat off the deep end with regards to conspiracy theories.

AUGMENTED LEGENDS

_Other videogame legends who sports various enhancements

BIONIC COMMANDO

■ Nathan 'Rad' Spencer carries a gun in one hand, and has a grappling hook for his other hand. *Bionic Commando* has seen our hero unable to jump, but very able to utilise his cyborg arm to swing over gaps…

CYBERDEMON

■ Imps, pig demons, zombie soldiers – whatever, you can take them out easily. But then you encounter a hellbeast that's half machine, and half something you never knew you were scared of that instantly terrifies you.

MASTER CHIEF

■ Some see him as bland, but there's no doubting the huge, passionate following for *Halo*'s cyborg hero. To be fair, he was taken as a child and indoctrinated into fighting the Covenant by a shadowy cabal of the UNSC.

KANO

■ Hands up who didn't want Kano's faceplate as a child? Anybody who didn't put their hand up is either a liar, or didn't play *Mortal Kombat*. The heart-ripping scourge of Sonya Blade was easily the coolest of Midway's original cast.

TYRANT

■ Barry Burton may be the hero of the original *Resident Evil*, but the big baddie of the biological weapons on show has to be the Tyrant. Massive, with a huge claw for a hand, this guy was something else.

AGENTS

■ *Syndicate*'s agents are meant to be poor saps dragged from their normal lives, riddled with implants and forced to do the bidding of a morally bankrupt corporation. But hey, if it helps the bottom line what does it matter?

BARRET WALLACE

■ We can all look back and smile at Barret's poor impersonation of Mr T in *Final Fantasy VII*, but there can be little doubt as to just how cool his makeshift machine gun arm made him.

CYBORG

■ *Bioforge* looked mindblowing back when it was released in 1995, and even though it has aged quite badly there's still a twisted beauty to its main character, the cyborg. You can almost feel his pain, looking at those augmentations.

» [PC] _Maybe in 15 years we'll say this looks quaint, but for now it's still rather pretty.

» [PC] _Adam Jensen's takedowns might seem jarring, but they ended up being a fantastic addition to the series.

Set in one city – New Orleans – and another prequel with JC Denton's father, *DE3* only saw life in planning documents and concept art before, in 2005, Eidos closed Ion Storm for good. The only game to be cut from the same cloth was Crystal Dynamics' *Deus Ex: Clan Wars* – eventually released as a very different beast in the shape of *Project Snowblind*.

Deus Ex was, for all intents and purposes, dead. Its creators were gone, its studio closed down, its reputation middling at best thanks to the misfire that was *Invisible War*. But the hope remained – the fans weren't going to let something they loved so very much be forgotten Fortunately, Eidos – and its new parent, Square Enix – was listening intently, and six years later the fans got exactly what they wanted.

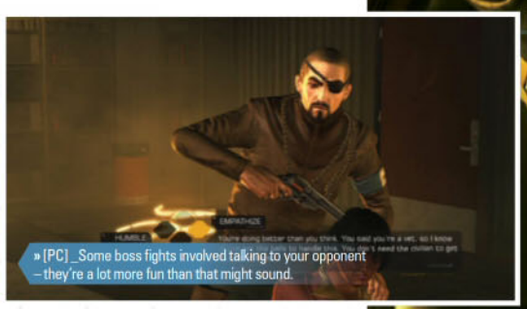
Deus Ex: Human Revolution had two huge benefits working in its favour: it was never really expected to happen, and it certainly wasn't expected to be anywhere near as good as it was. Hitting consoles and PC in 2011, this prequel took a different tack – conspiracies were still in the background, but it was themes of transhumanism, and the very question of what it is to be 'human', that made up the main thrust of the setting.

Eidos Montreal couldn't have chosen a game with higher hopes than a new *Deus Ex*, and this wasn't lost on *Human Revolution*'s director, Jean Francois Dugas. "It was very challenging on all ends," he says, "We'd never made a game like that before. *Deus Ex* was an untouchable classic. We were also building a studio at the same time, so it ended up being quite the journey. But one that we'll remember."

It took a long time for the third game in the *Deus Ex* series to be released, and fan fervour for the sequel reached – relatively reticent – fever pitch before the game's release. But even with all the time that went into *Human Revolution*'s development, the team was able to release something around 85-90% the same as the initial vision, according to Jean. "All the things we cut were minor things that would have been cool – like functioning ATMs – but nothing cut was worth screaming about." Ultimately the time was used, comparatively speaking, better than it was n *Invisible War*. "The time we got to make the game was what we needed to make it as great as we could," Jean highlights, "So we stayed focused and we used our time to make a difference."

A concern of fans before *Human Revolution*'s release was the lack of involvement of Ion Storm alumni, though Jean said the team was able to speak to Warren before its release. "He

> "It was very challenging on all ends. We'd never made a game like that before. Deus EX was a classic"
> Jean Francois Dugas



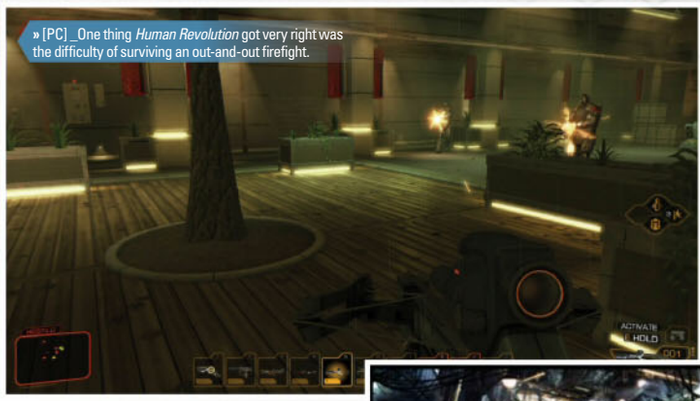
» [PC] _Some boss fights involved talking to your opponent – they're a lot more fun than that might sound.

» [PC] _Sometimes you don't have much choice in a situation – there's no talking O'Malley down.

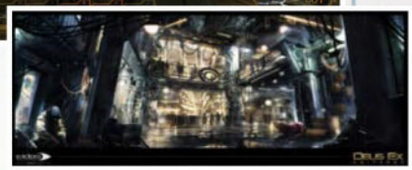
seemed to like where it was headed," he explains, "But we never had a discussion after the release of the game to pick his brain."

We asked if the underperformance of the second game had any impact on the team, or on development of *Human Revolution*, but Jean highlights this wasn't the case. "When you work on a game, you always want to make it the best you can," he says, "So in the end we pressured ourselves not only because it was *Deus Ex* but because that's what we do for a living. We are passionate about our craft.

For all the doubts and worries *Human Revolution* was a big success, and brought plaudits to Eidos Montral, as well as a credibility boost to a series that had been, in a small way, flagging since *Invisible War*. But the feeling on release wasn't one of pure joy for Jean. "It felt like my girlfriend broke up with me," he laughs, "I felt empty. Lost. It's not a good feeling, to be honest – but we were happy with the final product."



» [PC] _One thing *Human Revolution* got very right was the difficulty of surviving an out-and-out firefight.



Following *Human Revolution*'s critical and commercial success, Square Enix released a mobile spin-off in the shape of *Deus Ex: The Fall*. This miniaturised take on the formula established by *DE:HR* was well-received, and while it certainly didn't shake up the formula like previous entries to the series, it was another welcome dose of hacking, espionage and augmentations.

Square Enix's new attitude of actually talking about the games it is making – even if we don't get to see them for a while – means we already know it has plans for more *Deus Ex*. Under the umbrella of '*Deus Ex: Universe*', we will see new 'core' games on PC and console, with more supporting titles on smartphone and tablets – and the near-obligatory transmedia books, graphic novels and so on.

While most of the team behind *Human Revolution* is working on its sequel, we had to ask the original two games' main men what they thought – would they ever go back to *Deus Ex*? Warren is effusive, "Well, there are still a couple of stories I planned before the first game came out! Yeah, I'd love to go back to the *Deus Ex* universe.

"But a new game would have to be very different. I mean, conspiracy stuff was all the rage at the turn of the millennium. I'm not so sure it's as central to western culture today the way it was then. You'd have to look for different real world inspirations, which would be a ton of fun to do. So, yeah, I'd go back and revisit the world of JC Denton. You bet."

Harvey, meanwhile, voices his desire to work once more with Warren – a man he admires and enjoyed working with previously – but he admits that he's having a lot of fun right now with Arkane. "I worked with Warren on and off for nine years, which happened to come at a pivotal time of growth and change for me," he explains, "The *Deus Ex* series (or something spiritually akin) is rich with possibility. But part of that depends on what you emphasise. Some game designers might focus on the narrative design – and characters with their own competing agendas – while others would look to the likely crisis point of technology, population growth, and cultural conflict as a background.

"There's a lot there, from old school RPG systems to moral expression to conspiracy theory, and part of the challenge would be deciding what to elevate. But having said that, I've been working with Arkane for seven-plus years and I'm excited about the kinds of games our studio makes."

One great game, one missed opportunity, and one beloved masterpiece is all it takes to get this much love for a series from those who make the games. While it may no longer be in the hands of those who originally came up with *Deus Ex*, one thing is certain: the future – of the future – is looking bright.

MOD IT, PLAY IT

_The original Deus Ex still has its charm, but bringing it up to modern standards is straightforward thanks to the efforts of committed modders out there

STEP ONE

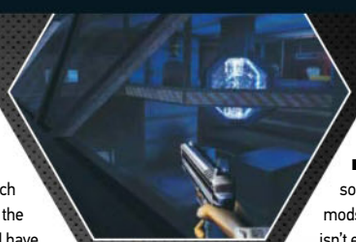
■ You've bought and installed *Deus Ex*, and it's patched up to spec. First of all you'll want to download HDTP. This replaces the low res textures with much higher quality ones, models, animation and all kinds of other tweaks – all of which completely fit the style of the game.

STEP TWO

■ You'll now want to download the mod, New Vision, which is another impressive amateur effort to improve *Deus Ex*'s standard textures. While HDTP focuses mainly on characters and items, New Vision aims to improve the environments surrounding the player.

STEP THREE

■ You'll now want to download Shifter – a mod which fixes, tweaks and improves on the few issues that *Deus Ex* does still have out of the box. Useless items are gone, lost content is restored, surviving bugs are squashed and numerous little irritations are eliminated. Oh, and it adds multiplayer.



STEP FOUR

■ Now we get less exciting – download Deus Exe and the *Unreal* engine Direct3D 10 renderer. The former is an launcher that includes the ability to change settings you can't in the original release. The Direct3D renderer is a tool written to allow the game to render using DirectX 10.

STEP FIVE

■ You will need to fiddle with some settings to get all of these mods functioning together, and there isn't enough space to go into all of that here. Check out this Reddit thread for an explanation how to get everything up and running – and happy sneaking/shooting! http://bit.ly/1arFKRt.

SHOVEL KNIGHT

As something of an indie darling, Shovel Knight soared to critical and commercial success by drawing on its platforming forebears of the 8-bit era, proving the retro classics still hold the same weight they once did

■ DEVELOPER: YACHT CLUB GAMES ■ SYSTEM: PC ■ GENRE: PLATFORMER

To anyone paying attention, the driving force behind *Shovel Knight* is obvious. Replace the titular hero's spade with a walking stick, swap the sprite out for a top-hat-wearing duck and set a stage in the Himalayas and you won't notice much difference between *Shovel Knight* and its core inspiration, Capcom's NES platformer, *DuckTales*. And though the range of games that helped form this challenging platformer cover everything from *Super Mario* and *Zelda II* to *Mega Man* and even more obscure titles such as *Faxanadu*, it was really that pogo stick bounce that stands out. "Really, the *DuckTales* pogo mechanic is a variation on *Mario*!" says David D'Angelo, one of the programmers on *Shovel Knight*. "When you bounce off an enemy, you get some additional height, just like *DuckTales*. Thousands of games have used a downward attack like this and it's enjoyable in every single one!"

Just like *DuckTales* before it, mastering the ability to bounce off enemies to reach some otherwise inaccessible places – even avoiding hazards that would otherwise kill – is a key part of the game, but David tells us the mechanic was actually formed from *Zelda II*. But there's so much more insparation, too: the various bosses you'll encounter riff on the approach *Mega Man* takes to its level design; there's a *Super Mario 3* style overworld map; and even weapons from *Castlevania* are reworked into their own *Shovel Knight* equivalents. Despite all these influences, however, it's the art style that stands out the most – and it should be at once familiar to anyone flicking through these pages, but all the same manages to feel something of its own. "We wanted it to be clear to everyone what kind of game we were trying to create," claims David. "We could have decided to make a game with gorgeously rendered HD art, but we wanted to use pixel art to make it abundantly clear that this game was a simple experience like those in the Eighties. We wanted everyone to know that this game would give the players a lot of the same experiences, emotions and fun they experienced then."

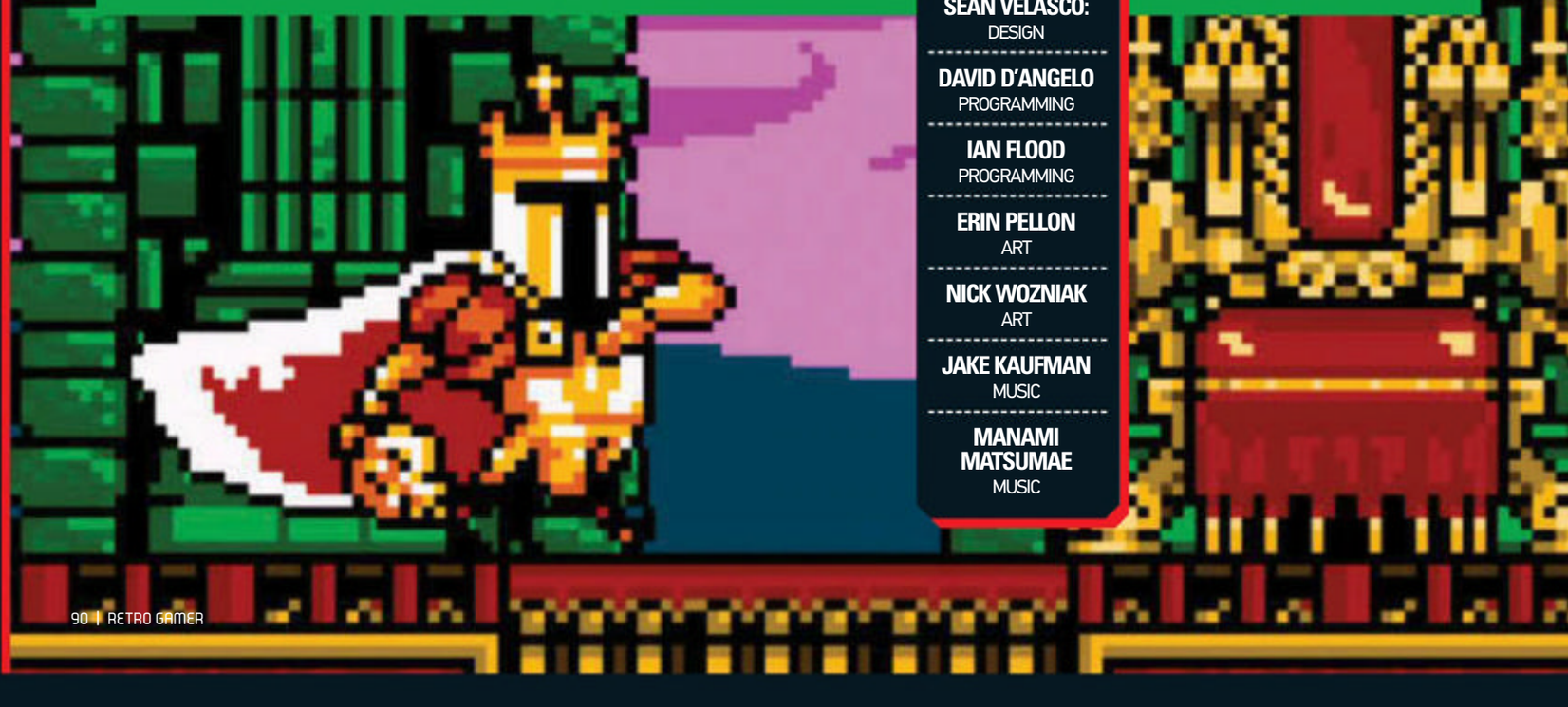
And what would a good retro game be without recognisable chiptune music? Well, *Shovel Knight* has it in the spadeful. It gets better, though, since developer Yacht Club Games actually managed to collaborate with famed composer Minami Matsumae, whose work at Capcom includes *Mega Man*, *Final Fight* and *Mercs*. David describes the opportunity as "a huge honor" adding that the team "couldn't believe it every step of the way!" After being contacted during its Kickstarter campaign about a potential collaboration, Matsumae later got involved – returning to game composition after 20 years. It helped, too, since the music really stands out, captivating all that play in *Shovel Knight*. "The music is such large part of why NES classics stick with us so much," says David. "Especially playing a difficult game, having songs that encourage you to keep playing and stay motivated is really important." And boy is *Shovel Knight* tricky, just another thing the game brings over from the retro games that inspire it.

With the success that *Shovel Knight* has garnered, David admits the team would like to turn it into a series, riffing on the retro gaming eras that colour our gaming heritage. "It would be fun to take *Shovel Knight* through the ages," he teases, "*Super Shovel Knight, Shovel Knight 64*... the possibilities are endless!"

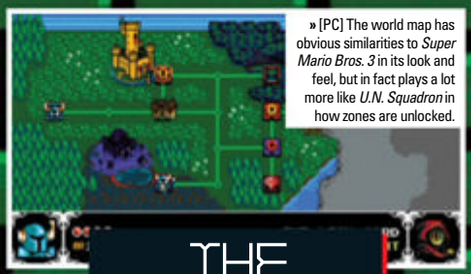
THE TEAM

The people that made Shovel Knight happen

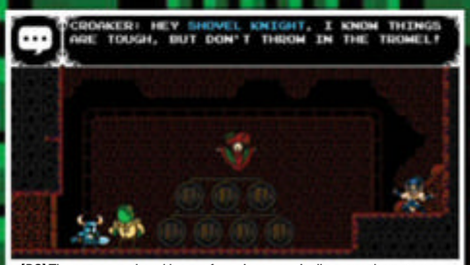
- **SEAN VELASCO:** DESIGN
- **DAVID D'ANGELO** PROGRAMMING
- **IAN FLOOD** PROGRAMMING
- **ERIN PELLON** ART
- **NICK WOZNIAK** ART
- **JAKE KAUFMAN** MUSIC
- **MANAMI MATSUMAE** MUSIC



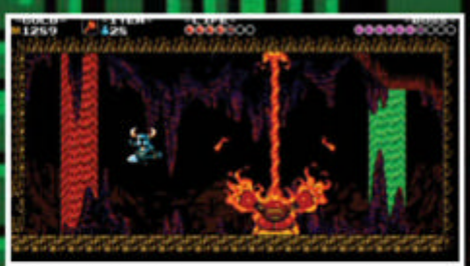
» [PC] Many of the stages were set in particular locations, allowing for some interesting gameplay changes. On the whole, they are easier when tackled with unlocked abilities.



» [PC] The world map has obvious similarities to *Super Mario Bros. 3* in its look and feel, but in fact plays a lot more like *U.N. Squadron* in how zones are unlocked.



» [PC] The game was loved by pun fans since practically every character you meet throughout the game has some awful shovel-based wordplay for you.



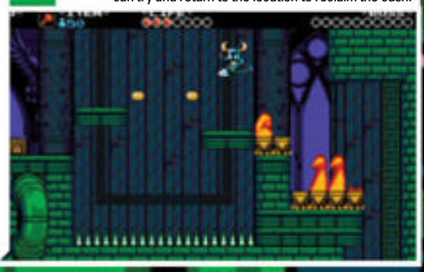
» [PC] Much like *Mega Man*, the bosses you encounter were all themed on abilities or powers, which the Shovel Knight can then use in his own, new way.

> **"We wanted everyone to know that this game would give the players a lot of the same experiences, emotions and fun they experienced then"**

INFLUENCES

The games that inspired Shovel Knight…

DUCKTALES
ZELDA II:
THE ADVENTURE OF LINK
CASTLEVANIA III:
DRACULA'S CURSE
MEGA MAN
SUPER MARIO BROS. 3
U.N. SQUADRON
FAXANADU
WAI WAI WORLD
DARK SOULS



» [PC] The hunt for cash is as real as it ever was in *DuckTales*, though the money actually has a function here. If you die, you can try and return to the location to reclaim the cash.

THE TEAM ON SHOVEL KNIGHT

DARRAN JONES

■ *Shovel Knight*'s early association with the Wii U has ensured it slipped under the radar for many gamers. Luckily, it's being released on more and more systems, meaning everyone will be able to enjoy it.

NICK THORPE

■ The level design is very strong and it looks lovely, but for me the star is the shovel itself – there's something about that *DuckTales*-style hopping attack that I find satisfying, even if it's not so different to a regular jump.

JONATHAN WELLS

■ Being a great fan of the NES I'm a huge fan of *Shovel Knight*'s art style. I'm also happy that it's heading to Xbox One, and am really interested to see how the Battletoads will be integrated into it.

DAVID CROOKES

■ If you are going to take inspiration from games, then *DuckTales* and *Mega Man* are good choices. There's lots of mileage in 2D platformers – harking back to the glorious 8-bit days helps to prove that.

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CARLETON HANDLEY

From Spitting Image on the C64, to having a kick around with Fifa Soccer, Carleton Handley has spent three eventful decades in the games business. He tells Paul Drury about beating up Thatcher and becoming an Instant Hero

It's been quite a journey for Carleton Handley since joining the videogames industry back in the Eighties. Starting with an Acorn Atom at home, he plied his coding skills on the Commodore 64, with, by his own admission, varying degrees of success, before moving on to the Game Gear in the Nineties, where his keen eye and attention to detail delivered a pair of fine sporting titles. His handheld version of *FIFA Soccer* was enough to get him headhunted by premier Manchester developers of the day, Software Creations, where he was amongst the very first British programmers to work on the PlayStation and N64. He currently produces iOS and Android games and his most recent project, *Instant Hero*, has been a collaboration with the retro graphic wizards, Army Of Trolls. Let his dulcet Northern tones lead you from pixels to polygons and then back again...

You've been making games for almost thirty years now, Carleton. Have you ever felt like doing something completely different?
I don't think I've got the skills to do something different now [laughs]. It's all I've ever done.

So you went straight into game programming after leaving school behind?
I left school at 16 with no real qualifications. My friend and I would walk around our home town, Heywood, near Manchester, go into shops and ask for a job. I applied for a job cleaning tables at a service station near my house, and if I'd got that, I'd probably never have become a programmer. But then I got on a YTS [Youth Training Scheme] as a games programmer.

That sounds better than wiping up spilled coffee.
It was run by Icon Design which used to be Lothlorien, though my actual placement was at a little [development studio] called Walking Circles, who had been Design Design and had done stuff like *Halls Of The Things* for the Spectrum. I got paid £26.50 a week, with four days on placement and one day at college. There were a load of chancers on the course, so I kind of stood out because I'd had a Commodore 64 since I was 13 years old and I could actually program. One of the tutors on the course was Doug Anderson...

Hang on, Doug Anderson who wrote the BBC Micro version of *Chuckie Egg*?
Yeah but he didn't mention it. It's funny because we work together now...

Did they set you straight to work on *Wanderer*, your first published game?
I'd been doing the YTS for three months and we got the *Wanderer* contract but we had no C64 programmers. We interviewed but no-one wanted it. I don't think they were paying a king's ransom. So they said I should do it and Graham Stafford would be my mentor. He was a brilliant man and a brilliant programmer. They took me on full-time on a bit more money than the YTS and it was really exciting to have my first job. And no more college nonsense!

The game was a conversion of a 16-bit title and didn't exactly get glowing reviews.
'A vector graphics turkey' was my favourite quote. That was harsh but I've always judged myself against the very best… and I'm not the very best. I was 16 years old, writing a vector graphics game on a completely unsuitable format. I mean, I didn't expect it to come in with a *Zzap!* 'Sizzler' but I didn't think it would get panned so much either.

You must have been proud to actually get a game you'd written on shop shelves, though.
You know, I always wanted to go into videogames but I can't remember it being this exciting thing when my games actually got published. Maybe I've blanked it because my first couple were such stinkers!

Now you're being harsh. Your second game, *Spitting Image*, was unique in allowing Pope John Paul II to kick the crap out of Mrs Thatcher.
They said they wanted a beat-'em-up and sent us a rough story about world leaders fighting but that was it. They gave us a list and I'm pretty sure four of them had died or gone out of power before the game came out! Maybe we were changing the world of politics with our bitingly satirical game.

***Spitting Image* came out in 1988 which was just at the time Ayatollah Khomeini was issuing a fatwa against Salman Rushdie for blasphemy in his book *The Satanic Verses*, yet you decided to put the Ayatollah in the game trading punches with President Ronald Reagan. Were you not**

> At Software Creations, there was money swishing about everywhere. Twenty percent of people did the work and the rest were getting pissed in the pub
>
> Carleton Handley

» The team that drinks together, thinks together… Carleton (centre next to a bearded John Pickford) with his Software Creations mates.

» [C64] The Pope and Reagan get ready to rumble in *Spitting Image*.

» [C64] Carleton's debut was *Wanderer*, asking a 16 year old rookie coder to create a 3D vector game wasn't the smartest move, as the review scores testified…

worried about receiving death threats from some C64 owners?
[laughs] You wouldn't do it now, would you? Looking back, it's a weird thing but they were doing that on *Spitting Image* on telly all the time. I do remember thinking the most offensive thing in the game was President Botha having a burning tyre round his neck.

Yes, 'necklacing' isn't your usual beat-'em-up special move. Did the negative reviews knock your confidence at all?
It's just a reviewer's opinion. It doesn't mean that much at the end of the day. *Zzap!* was my magazine and they hammered both of my first two games but they did get better reviews elsewhere. I mean, you're putting *Spitting Image* up against *International Karate*. Of course it's nothing like the quality of that.

Your third game was a conversion of Dave Theurer's late Eighties Atari coin-op *APB*, and was much better received by the gaming press.
The reason *APB* was much better is, even now, what I find difficult is game design and fine tuning gameplay. Nowadays, you have designers but back in the day, they thought it was all the same skill set. Yeah, the superstars back then like your Brabens and your Macleans could do it all but I couldn't. I could program but was pretty terrible at design. To be given an arcade conversion and be told 'copy this', you're free from wasting your time tinkering with gameplay ideas.

SELECTED TIMELINE

GAMES
- **Wanderer** [C64] 1988
- **Spitting Image** [C64] 1988
- **APB** [C64] 1989
- **Skull And Crossbones** [C64] 1991
- **Rugby: The World Cup** [C64] 1991
- **Behemoth** [C64] Unreleased
- **The Hunt For Red October** [PC] 1991
- **Bloodline** [Amiga] Unreleased
- **FIFA Soccer** [Game Gear] 1993
- **Winter Olympics Lillehammer 94** [Game Gear] 1994
- **World Cup 98** [N64] 1997
- **FIFA 99** [N64] 1998
- **FA Premier League Stars** [PC/PlayStation] 1999
- **Euro 2000** [PC/PlayStation] 2000
- **Waterworld** [PlayStation] Unreleased
- **Dragon Tales: Dragon Seek** [PlayStation] 2000
- **ET And The Cosmic Garden** [GBC] 2002
- **Future Tactics** [PC/GameCube] 2004
- **Sticky Balls** [PC/Pocket PC] 2005
- **California Games** [mobile] 2005
- **Hulk** [mobile] 2006
- **Ducati Extreme** [mobile] 2006
- **Jungle Jewels** [iOS/Android] 2010
- **Instant Hero** [iOS] 2015

Did you get sent the arcade cabinet?
Yeah, we got the machine and some notes. No source code, though. We were a very small company but rather randomly, had an accountant. He'd owned the company with Graham Stafford from the days when they were publishers and he'd stayed on. Basically, he had a lot of free time on his hands, so he ended up playing the game for days and mapped out the whole world by hand. It must have been an arduous task because he couldn't take photos and it was massive – 32K just for the map. If it had been a flip screen game it would've been over a 1000 screens, and we got it to decompress the map in real time on the Commodore 64. What about that!

That must have helped you get the contract for your work on the conversion, *Skull And Crossbones*. Do you deserve a chest of gold or be made to walk the plank for this one?
I see what you've done there. I think it was treated harshly at the time. Looking back, when you take away the top ten per cent of games everyone remembers, I think it's around the top of what's left! It's got some good stuff in it. It has all the levels from the arcade, some lovely tunes, different for every level, really nice colourful graphics... the gameplay's a little lacklustre but that was down to the source material.

You then tackle a very different genre with *Rugby: The World Cup*. Are you a rugger man?
Not even slightly.

Do you think that matters?
It might be helpful if you like the sport but then I don't know many rugby playing programmers. I don't think that Venn diagram would have many people in it.

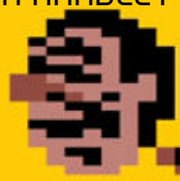
Fair point. Was there any pressure in handling the official game of such a big sporting event?
Oh it wasn't an official licence even though everyone thought it was. By cleverly swapping the first two words around, Domark avoided paying a £100,000 license fee!

The crafty devils! Was doing a sports sim a big challenge after your previous arcade titles?
Like *Wanderer*, it was such a mismatched project for

» [C64] *Skull And Crossbones* was one of Atari's lesser known coin-ops.

FIVE TO PLAY

Essential games by Carleton that you need to play immediately



SPITTING IMAGE 1988

■ Whilst no-one, including Carleton, is claiming this is a great game, it is a wonderful timepiece of a bygone age. Licensing an Eighties TV institution featuring rubber puppet caricatures of politicians and public figures of the day might seem a leftfield. To then chuck them into a button-mashing beat 'em up is either deranged or inspired.

APB 1987

■ After two 'false starts', Carleton's third game was this impressive arcade conversion. Designed by Dave Theurer of *Missile Command* fame, *APB* offers a sprawling map and tasks you, as a rookie police officer, to apprehend various law breakers, from careless drivers and litter bugs to hardened criminals.

WINTER OLYMPICS LILLEHAMMER 94 1994

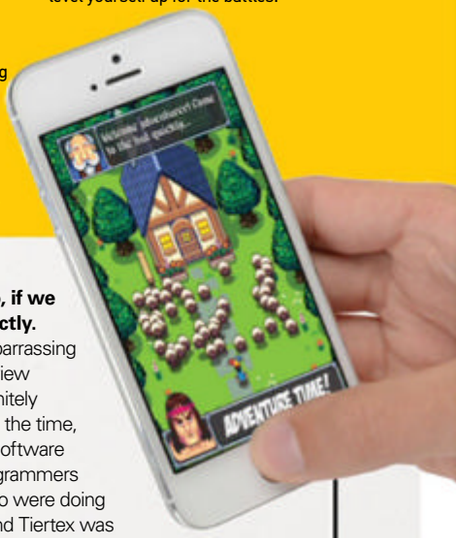
■ Carleton began coding for the Game gear in the early Nineties and offered this fine collection of mini-games. The luge and biathlon are highlights, the latter featuring a nifty gunsight, and the ski jump section also provides some opportunities for Eddie 'The Eagle' Edwards-style disasters.

FIFA 99 1998

■ Carleton's Game Gear version of the first *FIFA Soccer* was a classy calling card, and by the end of the Nineties, he found himself a key member of the *FIFA* team, working on four related games for EA. He picks this one out as his favourite and recalls many happy hours in the Software Creations offices trying to perfect his through balls.

INSTANT HERO 2015

■ Carleton's recent project is a charming mix of *Peggle* and old-school RPGs, which sees you hurl your hero into foes, hoping they'll bump and barge their way through. Perfect for playing in short bursts, you'll encounter numerous boss fights and witty *Zelda*-inspired exchanges on your journey, as you level yourself up for the battles.



the hardware. *Rugby* needs loads of sprites for the players right next to each other, so we had to use software sprites, which is why the pitch is bland, and the gameplay didn't work. You just kept getting stuck in rucks… but then if you watch real rugby, it is like that!

It was to be your final C64 game, though you were working on an unreleased shoot-'em-up called *Behemoth*.
A lost gem! We were basically ripping off *Armalyte*. Everybody was jumping on that scrolling shooter bandwagon. We had some levels going and shopped it around but there were no takers. That was about the time we did the PC version of *The Hunt For Red October*. We did the movie licence version, and the whole design was based on us going to see the film. Four of us from Walking Circles went to the cinema and took notes...

> "Rugby: The World Cup wasn't an official licence. By cleverly swapping the first two words around, Domark avoided paying a £100,000 fee"
> Carleton Handley

You were literally scribbling down notes in the dark as you munched popcorn?
Yeah, it was a Tuesday afternoon, just us in the place and we were writing down scenes we could make into levels.

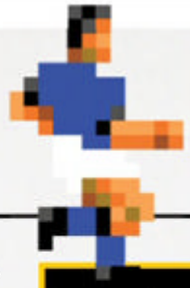
You also began an Amiga game in 1993 which, again, was never released.
Bloodline was going to be like *Alien Breed* crossed with *Halls Of The Things* and a bit of *Paradroid*. We had procedurally generated levels and 'line of sight' stuff but then Psygnosis approached us to do a game. We needed the work but they stretched it out and stretched it out and then said, 'Oh, we're going to take over the company.' Basically, they managed us into a position where we couldn't do anything other than sell out the company… and then they decided not to take me and a couple of others on.

Luckily you managed to get a job with Tiertex.
Luckily is a strong word. This was when I had my crisis of confidence. I was 21, I had a young daughter and I was out of work and thought I'm not going to get another job in the industry. I very nearly gave up. Then Tiertex offered me a job, though the wages were poor and it was one hell of a commute.

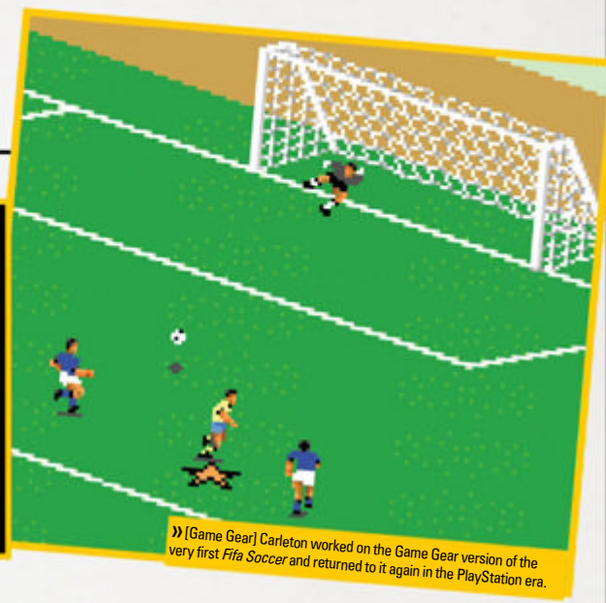
Tiertex had something of a reputation for producing shoddy conversions, too, if we remember correctly.
It was almost embarrassing to go for the interview because they definitely had that image. At the time, Manchester had Software Creations and programmers like Ste Ruddy who were doing incredible work, and Tiertex was basically this shovelware place. But it was a job and I thought I could go in and make them better!

An admirable goal, Carleton. Do you think you succeeded in that goal?
It turned out they had some talented people there and I made some lifelong friends, and yeah, I'm very ▶

» [C64] *Rugby: The World Cup*: less up and more under…



» [Amiga] Carleton as he would've appeared in the unreleased *Bloodline*.



» [Game Gear] Carleton worked on the Game Gear version of the very first *Fifa Soccer* and returned to it again in the PlayStation era.

proud of the games I did there. Both of them were really good. I think my Game Gear version of *Winter Olympics* is the best version! The Mega Drive one copies most of what I did.

Were you given a free hand to interpret the events as you saw fit?
Pretty much. I was given a list of events and so for something like the luge, I'd think, well *Winter Games* was brilliant, let's have a look at that!

Ah, so you went back to those classic Epyx games from the Eighties for inspiration?
They were outstanding and the Game Gear wasn't that different to the Commodore 64. We copied some of that and did some things a lot better. We did a lovely ski jump event and the biathlon had this excellent floating telescopic sight effect for the shooting.

You then handled the Game Gear version of the very first *FIFA* game. Did you think it was going to become this huge franchise?
No and I don't think EA did either. I thought it was nowhere near as good as *Kick Off 2*. I thought it was a pretty poor game, but I was excited to be working on it and I am a footy fan. I did some lovely stuff on that and they used my code base for the Game Boy versions for the next five years! I was really starting to take pride in what I was doing. Because Tiertex were a bit substandard, I was possibly better than some of the other people they had. That sounds really egotistical but I could've gone somewhere full of really brilliant people. I mean, I hadn't even bothered trying to go for an interview at Software Creations.

> "For Winter Olympics on the Game Gear, I thought, well Winter Games on the 64 was brilliant, let's have a look at that!" Charleton Handley

And yet that's where you moved to next!
I was poached! They had a tester there called Dan Curley, the Sega champ who'd been on telly with Dominik Diamond on *GamesMaster*. He was tasked with getting the top three programmers from Tiertex and I was one of them. I don't know what that says about Tiertex.

It must have felt like you'd 'made it'.
It was a really fun place to work but equally, it was the Dot-com boom and it had just been bought out. There was money swishing about everywhere. About 20 percent of people did the work and the rest were getting pissed in the pub.

Were you part of that 20 percent?
[laughs] Yes! I went there as their PSX programmer and this is how unprepared they were. [The PlayStation] wasn't out yet and I was supposed to be the programmer for *Waterworld* having come from doing 8-bit games. Just me. We didn't know what these games would need. By the time I left, we'd have eight programmers on a PlayStation game. And that's why *Waterworld* was a disaster.

It sounds like you were well out of your depth.
Software Creations had expanded so quickly we'd been moved out to a new office. The Pickford brothers were supposed to be the designers for the game but they just didn't have time to come to see us. They were part of 'the dream team' for the N64. Software Creations were the only British developers with a development kit and I think they just got wrapped up in that and took their eye off the ball with *Waterworld*. We had open water 3D levels and some pre-rendered levels that were a bit like *Operation Wolf* but no one was doing any design. Like I said, I'm not a good designer so I'd just be like, erm, I'll put a man there then! I'd be sticking Jet Skis in for no rhyme or reason.

***Waterworld* was never released and neither was your next game you worked on, *Ultra Combat*.**
That was another disaster. I was at Software Creations for three years before a game I'd worked on got released! I mean, we had a half a million dollar SGI Onyx kept in its own air-conditioned room… they had all this money but no thought of what to do. They had people upstairs messing about on these new machines, while downstairs, known as 'the dungeon', all these poor sods were doing *Rugrats* on the Game Boy, earning money that was keeping us in a job.

So you were one of 'the chosen ones' working on these exciting new consoles?
I was in the ivory tower, squandering the money! *Ultra Combat*, or *Blade And Barrel* as it was going to be called, was going to be *Atari Combat* for the 2600 writ large. You could be in tanks or helicopters and have two or four players fighting in these cities. It was pretty much finished but then Kemco sent over some of their top management who didn't speak any English. *Gunblade* had just come out in the arcade and they said they wanted us to change *Blade And Barrel* into that.

During the second half of the Nineties, you worked football games, starting with *World Cup 98*. Did you enjoy your 'footy years'?
Software Creations had almost eaten itself trying to do its own thing and then along came EA with *FIFA*, super efficiently run on their side. They wouldn't put up with the nonsense. And I think *FIFA 99* was a great game! To work on something you can still actually enjoy playing after eight months developing it was incredible. But by the time I was working on my fourth game, to be honest, I was getting bored of *FIFA*.

Is that why you left Software Creations?
The *FIFA* team had become the workhorses, bringing in all the money and having to work bastard

» Carleton (far right in hoodie) and the Zed Two team with John Pickford behind him and Ste Pickford sporting an *Elite* top.

» [Pocket PC] Carleton worked on two unreleased games for the Pocket PC (or Windows Mobile Classic Device), *Tetris* and *Sticky Balls*. Both were pretty good, he assures us.

YOU ASK THE QUESTIONS

We quizzed Carleton with your questions on the highs and lows of his long career

MAYHEM: Your games got very mixed reviews. Does it bother you at all?

You kind of knew the bad ones were going to be bad. I do remember fondly when *APB* got a *Zzap!* Sizzler. I was always more elated with a good review than down over a bad review. And *Rugby: The World Cup* was weird. *Zzap!* hated it but it got a really good review in *Commodore Format*. How do I explain the very different review scores? I'll say 'back hander'. Not from me! Though we took *Crash* out for a meal in Ludlow when we'd done *Spitting Image* and they still panned it. The reviewer finished it on his first go in the office. I was mortified.

MERMAN: What has been the biggest change that you have seen during your long time making videogames?

The internet! If you don't know how to do something, you can Google it. When we were doing *The Hunt For Red October*, we'd heard there was a crash bug with some ACER PCs so we had to go into Manchester to this obscure bookshop to buy a book on the BIOS to find one memory address which was causing the problem. Now, I could've found that out at the same time as talking to you!

MERMAN: Do you think you would ever code for an older machine again?

I know Roy Fielding, and he still writes C64 games like *Paper Plane,* but when I see free stuff like that with all the effort people must've put into it, I think, if you've got that talent, do something like I'm doing and get paid for it! If I had time to do a C64 game, I'd do an old style game for the Vita. Get me a development kit and I'll have a go!

hard for it. That was the last time I've worked on a big team and I don't want to ever go back.

You joined Zed Two, set up by your former colleagues, the Pickford brothers, right at the start of the new millennium.
I was poached again. The Pickfords were good friends and they had a project that needed a PlayStation programmer. They met me in a pub – I'd driven there and they hadn't. They were trying to woo me so as they got drunker and drunker, I talked up the wages until I was happy enough to go.

A smart negotiating style. The PlayStation project was a kids game based an animated series, which sounds like a real from *FIFA*.
Dragon Tales was an interesting project. On my first day, John Pickford said he'd arranged for me to go with him to New York to meet the people who did the TV show. I remember standing in Manchester airport thinking, hang on, is this a dickish joke they play on all new staff, get them to arrive there with their suitcases and go, ha ha, surprise! But it was real and it turned out pretty well. It was aimed at pre-schoolers, like 'push a button to move' kind of stuff, but it looked great and I've heard people say they really enoyed their time playing it when they were kids.

You followed it with *ET And The Cosmic Garden* for the Game Boy Color. Were you slightly nervous to be working on a sequel to what has been dubbed 'the worst game ever made'?
We put that to rights, didn't we? *ET* was something from my childhood and to have left school with no prospects and then to be working on a game based on one of the biggest movies ever was a nice feeling.

Whilst you were at Zed Two, you contributed to both *Future Tactics* and *Sticky Balls,* two games that perhaps didn't get the recognition they deserved.
Yeah, *Future Tactics* was pretty good but it had a troubled history. I remember doing some code so it would generate an email to your friends, like a 'play by mail' idea, something the Pickfords did later with *Naked War*. We also did some really good Pocket PC games – *Sticky Balls* and *Tetris* – which never came out.

Yes, however, things got a bit messy at Zed Two from what we can gather.
I don't think we got paid for *ET* and then *Warthog* stepped in, offering to take us all on. I took voluntary redundancy and got in touch with this bloke I knew from the *Waterworld* days who was running his own company doing mobile games.

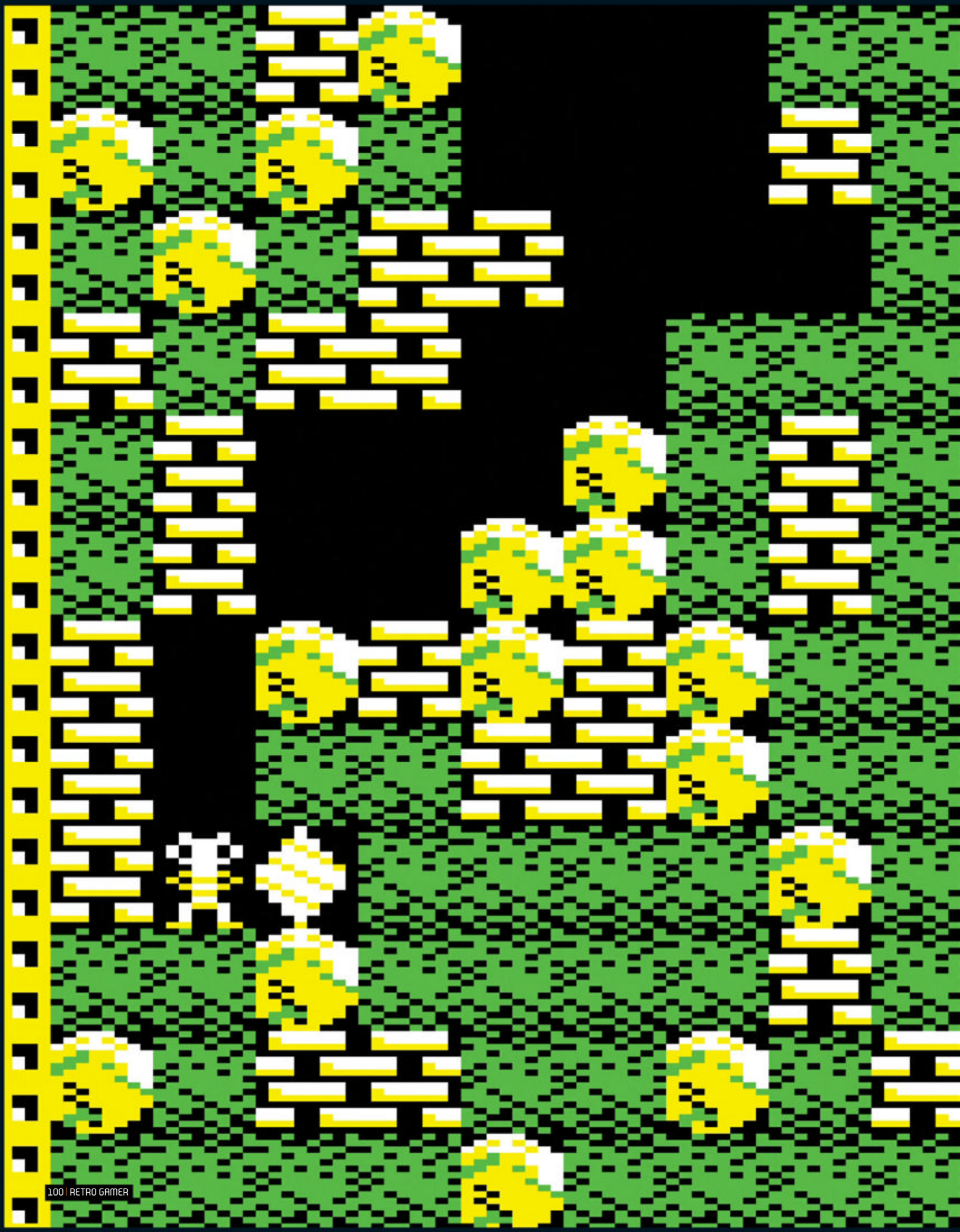
Did working on games for mobile phones, iOS and Android devices feel like a return to your Commodore 64 days?
Yeah and not only that, I got to do *California Games*! I hated the big teams thing and these were three month projects. You can't get bored in that time!

But it must be daunting when you were asked to do *Call Of Duty 2* for a phone…
[laughs] Yeah it could be challenging. I had like 40k to do that in. And you had to do versions for about 3000 different handsets! The first *Hulk* game I did with Graham Goring was a good little game. He's a really clever designer and it had all these *Zelda*-like puzzles...

Since 2010 you've been producing iOS and Android games as a freelancer.
I started with *Jungle Jewels*, which I was really pleased with, and now we've got a deal with Three mobile which keeps me in paid work all year round. I'm the luckiest freelancer there's ever been!

You must have seen a lot of changes during your three decades in the business.
Well, what I do has come round full circle. I'm doing little one man projects. The saddest thing is how many of my friends have been treated badly and left games because of that.

So finally, can you see yourself doing this for another 30 years?
I've just done an iOS game called *Instant Hero*, released at the start of the year with graphics by Army Of Trolls. It isn't dragging in the money yet so if I don't get a hit, then yes!



Boulder Dash

MY EYES, MY EYES...

» BBC MICRO » TYNESOFT » 1987

If you were a BBC Micro owner and lived in a bubble you might be forgiven for thinking that *Boulder Dash* is a *Repton clone*. After all, Tim Tyler's fantastic game was long in the tooth by the time this conversion finally showed up in 1987.

By the time the BBC Micro port appeared, there had already been four *Boulder Dash* sequels on other 8-bit systems, which made this extremely competent port by a programmer – known only as BEN on the title screen – look rather dated. It also didn't help that Superior Software was already on its third *Repton* game, a series by Tim Tyler that shared many similarities with *Boulder Dash*, but was more popular due to its huge in-your-face sprites, and, more importantly, being out first on the popular home system.

In addition to being an extremely late port, *Boulder Dash* on the Micro is exceedingly garish too, sporting a four-colour mode that chooses to find the worst colour combinations known to man. Some stages are so jarring it's like looking at a Magic Eye and you almost wonder if your eyes will melt due to the sheer strain that comes from continually concentrating on the gaudy visuals. Get past the gaudiness, however, and you quickly realise why there was so much fuss about *Boulder Dash* in the first place. The programmer has done a smashing adaptation of the original 8-bit game, with every single level seemingly perfectly replicated, meaning it's relatively easy to tackle if you were lucky enough to play the Atari 8-bit original.

It may have arrived many years too late (original owners First Star Software handed publishing duties over to Tynesoft) but *Boulder Dash* retained all the brilliance of Peter Liepa's original – even if it wasn't quite so easy on the eyes…

» Not everyone was treated well in the Eighties. The Matthew Smith sections are quite hard to watch.

>> It's taken nearly three years, but we've finally gotten our hands on From Bedrooms To Billions. Has the wait been worth it though? There's only one way to find out...

From Bedrooms To Billions

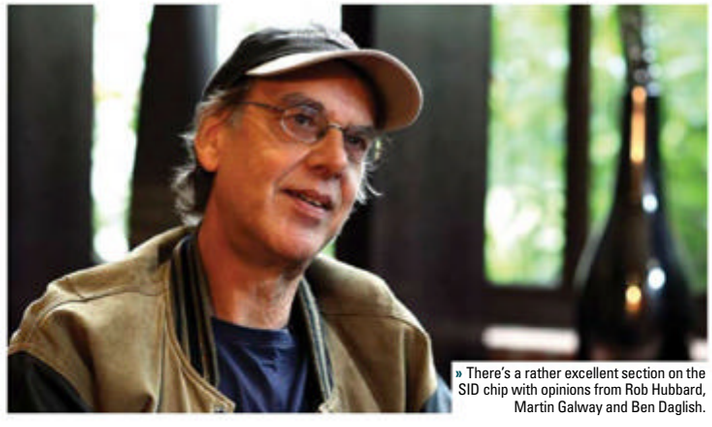
GOOD THINGS COME TO THOSE WHO WAIT

There's been a lot of expectation riding on *From Bedrooms To Billions*, which is hardly surprising when you consider that it was first announced nearly three years ago. A passion project created by the husband and wife team of Anthony and Nicola Caulfield, *FBTB* is an impressive achievement of filmmaking, with the pair sharing multiple credits across the project.

While there are already plenty of fantastic documentaries that focus on the games industry, many of them have a typical US or Japanese slant, with a focus on the usual big franchises and publishers. Realising that the British games industry is solely misrepresented, the Caulfields have attempted to put the record straight, giving some much-needed focus to UK's games industry.

By far the most impressive thing about *FBTB* is the sheer amount of interviewees that appear in the documentary. There are just over 90 individuals, including Peter Molyneux, David Braben, Gary Bracey, Jez San, Matthew Smith, Jeff Minter, Geoff Brown, Jaz Rignall and many, many more. It's a veritable who's who of the Eighties and Nineties and is a highly impressive roster of individuals. Of course, the downside of all these interviewees is that some of them are relegated to 'blink and you'll miss them' cameos-like appearances, a regrettable, however, understandable feature of a documentary that runs just short of two and a half hours. The lack of the Stamper brothers or the Housers is a tad disappointing, too, particularly when you consider the impact their companies have had on the UK games industry, but its feels churlish to complain too much when so many people have been tracked down and interviewed on camera.

The documentary is at its best when it charts the earlier days of the industry, explaining how a small cottage industry turned into a multi-billion pound behemoth. Key people such as Rob Cousins and Jeff Minter talk passionately about mail order services, packing up cassette tapes to send out and the sheer kinship that was shared at the early Micro Fairs. Minter is a particular highlight because the documentary highlights the sheer passion he still has for making videogames, even though he's never quite found the success and wealth that so many feel he deserves.



» There's a rather excellent section on the SID chip with opinions from Rob Hubbard, Martin Galway and Ben Daglish.

INFORMATION

- **FEATURED FORMAT:** BLU RAY
- **ALSO AVAILABLE ON:** DVD, DIGITAL DOWNLOAD
- **RELEASED:** OUT NOW
- **PRICE:** £14.99 (DVD) TO £114.99 (COLLECTOR'S BLU-RAY EDITION)
- **DEVELOPER:** GRACIOUS FILMS
- **AVAILABLE FROM:** WWW.FUNSTOCK.CO.UK/FROM-BEDROOMS-TO-BILLIONS

PICKS OF THE MONTH

DARRAN

From Bedrooms To Billions
It's hard to recommend the special editions, but the base version is certainly worth watching.

NICK

From Bedrooms To Billions
A good documentary that moves the focus away from the usual US marketplace.

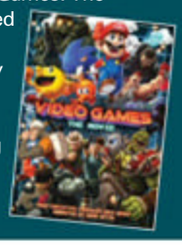
More essential gaming documentaries to watch

The King Of Kong

One of the most famous videogame documentaries ever made and it is still great fun. It takes a lot to be the king of *Donkey Kong* and Steve Wiebe and Billy Mitchell will do whatever it takes for their crown.

Video Games: The Movie

Produced by Zach Braff and Cliff Bleszinski, *Video Games: The Movie* is a polished look at the industry. The only downside is that it's heavily US focused, meaning it won't resonate with all gamers.



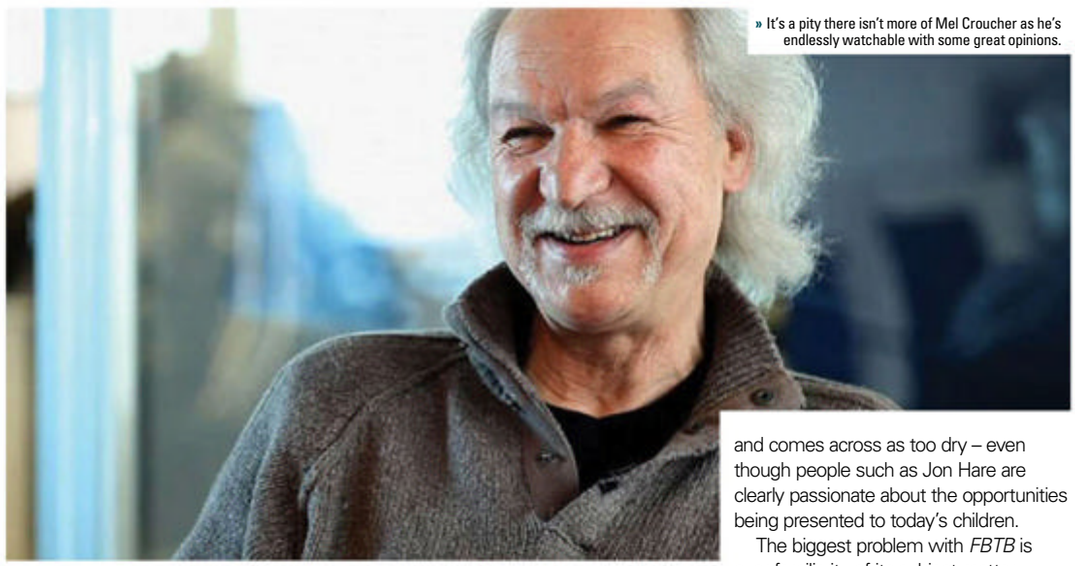
Indie Game: The Movie

It's pretentious in places, but this documentary still gives an insight into the trials and tribulations that face creators of Indie Games. The Phil Fish stuff is particularly excellent.

Video Game Invasion

Tony Hawk seems an odd choice for a host, but this is a surprisingly balanced documentary from 2004 that does a great job of charting the history of gaming (with a typical U.S slant). The only downside is it's a little dated now, with a whole decade missing.

» The man behind *Populous* is always good value and he doesn't disappoint here.



» It's a pity there isn't more of Mel Croucher as he's endlessly watchable with some great opinions.

After focusing on the early start up days, it moves on to some of the bigger players who were around during the Eighties, including Ocean, Imagine Software, US Gold and Domark. It's an interesting segment, highlighting why these companies were so successful at the time, and gives a crucial insight into just how driven some key players were.

There's also a large section on videogames magazines, although the focus is a little biased as it mainly focuses on *Crash* and *Zzap!64*, with a smattering of *C+VG* for good measure. It's interesting to learn that developers were just as interested in the release of each magazine as readers were, and it's perhaps easy to forget just how important they were to gamers in the Eighties and early Nineties.

Speaking of the Nineties, there's a definite change in the film once the developers do start talking about the arrival of the 16-bit computers and home consoles. For the most part, Sega and Nintendo are painted as the bad guys, coming in with financial requirements that killed off many of the earlier publishers, who simply didn't have the money to compete with the likes of Ocean and US Gold. It does highlight the rivalries between the two companies (you were either with Nintendo or Sega) but it also highlights that the dreams many of the developers first had in the early Eighties was starting to slip away from them. There's still gold to be found in this segment of the documentary and a few individuals do highlight the importance of the consoles, but it feels jarring and a little out of place.

> **"The documentary is at its best when it charts the earlier days"**

» People like Jeff Minter come across extremely well - talented people who just love making games.

The same can be said for the last segment of the documentary, which focuses on the indie scene (far too briefly we might add) and the return of computer programming to the school curriculum. It's a good opportunity to bring the documentary full circle, once again highlighting the prominence of the bedroom coder, but it's a little fumbled and comes across as too dry – even though people such as Jon Hare are clearly passionate about the opportunities being presented to today's children.

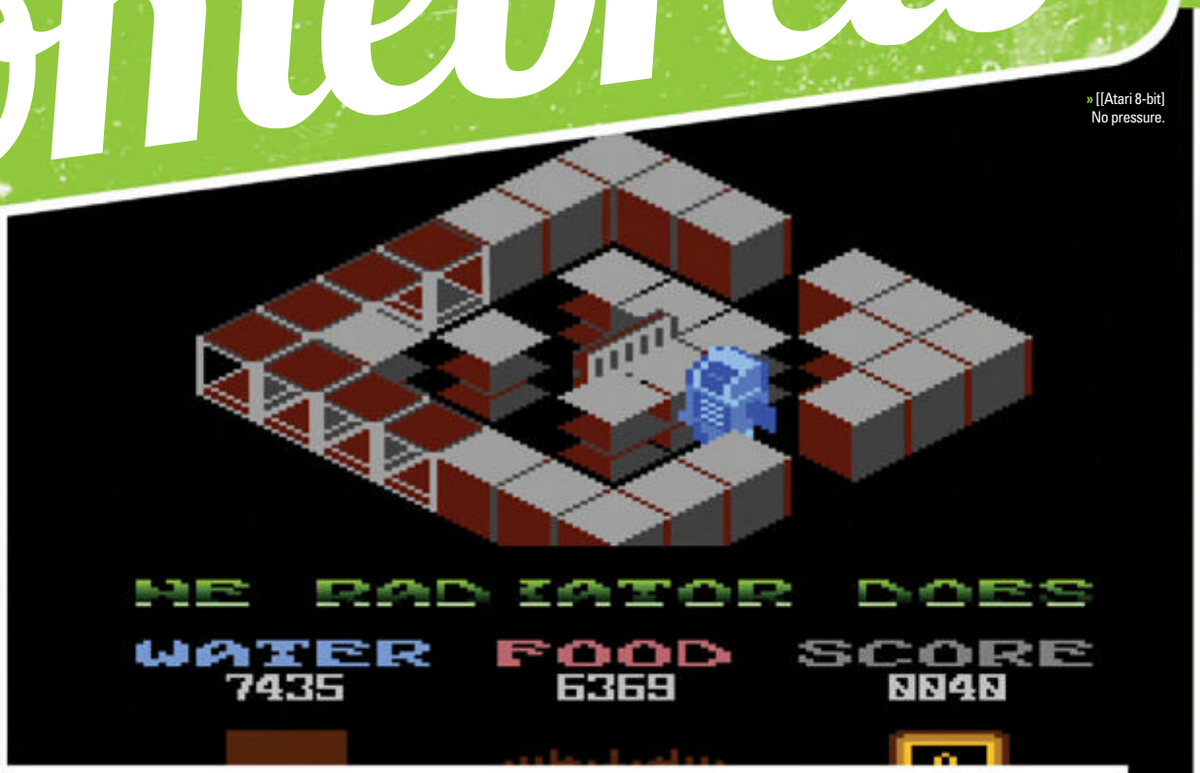
The biggest problem with *FBTB* is over familiarity of its subject matter. While there are some genuinely insightful anecdotes, most of the material will be well known by anyone with an interest in retro gaming. It's particularly noticeable in the expensive Special Edition. Although it includes a good 150 extra minutes of additional content, there's very little here you won't already know about, making it extremely hard to justify the £30 asking price (although the Geoff Crammond content is very, very insightful).

The premium editions may fall way over the line in terms of cost, but the standard 'vanilla' version is highly recommended at its current asking price. While it doesn't offer any stunning revelations or innovations, it does wrap you in a lovely nostalgia blanket and does a great job of highlighting a part of the games industry that gets very little exposure. A solid documentary. ✱

In a nutshell

While it's a rather functional look at the games industry, there are still enough entertaining anecdotes to make it worth owning.

Welcome to Homebrew



» [[Atari 8-bit] No pressure.

» I've recently stumbled across Electric Adventures (Kikstart.eu/electric-adv) and the interesting series of game programming tutorials being posted; the plan is to develop a simple action game based loosely on Astrosmash for the Intellivision, then port it to a range of 8-bit machines while explaining the processes involved

JUST THE ARTIFACTS, MA'AM

Isometric classic Chimera receives a new Atari 8-bit makeover

The original *Chimera* was developed by Shahid Ahmad for a range of 8-bit systems and published by Firebird in 1985. The plot revolves around the spaceship, Chimera, a huge vessel which appears to be completely devoid of life but is fully automated, armed to the teeth and currently aiming it's guns straight at the defenceless Earth. The player must take on the role of a lone spaceman who has boarded the craft in order to search for and activate its self destruct system. There is a sequence of events that must be completed in the correct order to prime the detonation, and each requires the completion of what the instructions refer to as a 'Multi-stage Disablement Of Artifacts' or DOA sequence. Once you complete the DOA sequence, well, you guess what happens.

The Atari 8-bit version of *Chimera* wasn't as optimised as the others but just shy of three decades after the original's release, there's a new version available from Atari Age regular, Tezz, called *Chimera+* which addresses several issues; the speed of play has been improved so the player-controlled spaceman now moves at a constant speed and, since he's also in a different colour scheme, he's easier to keep track of as well. The sound effects have been tweaked, the title page now sports a ported version of the Rob Hubbard soundtrack that was composed for the C64, and Shahid Ahmed's vocal samples have similarly been converted over so the game welcomes players by saying its name and screams when the spaceman dies. Nice!

But along with this update to *Chimera* comes some even more exciting news: the work that Tezz has already done on the programming behind this remix means that it can be developed into brand new isometric 3D games, and ideas are apparently already being considered. The updated *Chimera+* can be downloaded from the Atari Age forum thread behind Kikstart.eu/chimera-a8.

> "The title page has a ported version of Rob Hubbard's soundtrack"

Incoming

More homebrew goodies here, including a game where you fight some enemy mutant cows

KIKSTART.EU/NIPPON-AMIGA

▲ *Taste* is just a demo for the moment, but the developers are planning to write more Amiga games.

▼ *Cows* is currently a work in progress about defending the planet from mutant cows trying to destroy the environment.

KIKSTART.EU/COWS-2600

SPECTRALINTERLUDE.COM

▲ *Castlevania: Spectral Interlude* is a fan-made *Castlevania* for the Spectrum which was based on *Castlevania 2*.

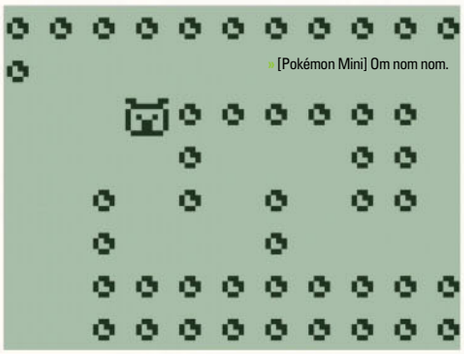
NEW GAMES NEEDED

If you have a homebrew project you would like to see featured then please contact us at:
retrogamer@imagine-publishing.co.uk

KEEP TAKING THE PILLS

***Pac-Man* fever** could soon hit the C64 again with *Pac-Man Arcade*, a new attempt at fully recreating the original coin-op on the Breadbin. A first preview is already downloadable from behind Kikstart.eu/pac-preview-c64 but should only be considered a proof of concept rather than anything else since none of the ghosts move and Pac-Man can't even consume dots at this stage. But it looks promising and the author has said that he's using Jamey Pittman's *Pac-Man* Dossier which reverse engineers a lot of the game's secrets, so we're looking forward to seeing how this progresses.

» [C64] Old but also new.



» [Pokémon Mini] Om nom nom.

C IS FOR COOKIE

Bears love to eat cookies, at least they do in the world of *Mini Cookie* which is a new game for the Pokémon Mini where a bear's disembodied head must be guided around to eat every biscuit on the screen. There aren't many homebrew games around for this platform so, although it's a very simple game and probably won't tax anybody, we were interested to see that the author has released his source code and even put together a development kit so that other programmers have somewhere to start. These can all be downloaded from the author's website at Kikstart.eu/mini-cookie-pm.

▼ Horror survival adventure game *Zombi Terror* has recently been converted over to the C64 and made available to play.

KIKSTART.EU/ZOMBI-TERROR

Homebrew heroes

Along with being behind the French game development event RetroGameJam.com, David Mékersa develops retro games including Scramble Slug. We talked to him about cramming multiple games into a single screen

Where did the initial idea for *Scramble Slug* come from?
With the Ludum Dare 31 theme being 'entire game on one screen', my idea was to scale down a retro game using several screens to fit into one. *Scramble* was my favourite game when I was twelve (it was on my Vectrex at the time), so I unrolled the scrolling gameplay over different strips in one screen and let the player look at everything in a single glance.

And what was the idea always to combine *Scramble* and *Metal Slug*?
I found [it] really fun to change the point of view of the player by changing the character he or she is controlling. It gives the feeling of travelling inside the game. I wanted to relate a full trip: land on a planet, infiltrate a head quarter, and walk in it with a gun. I chose *Metal Slug* because of the jeep!

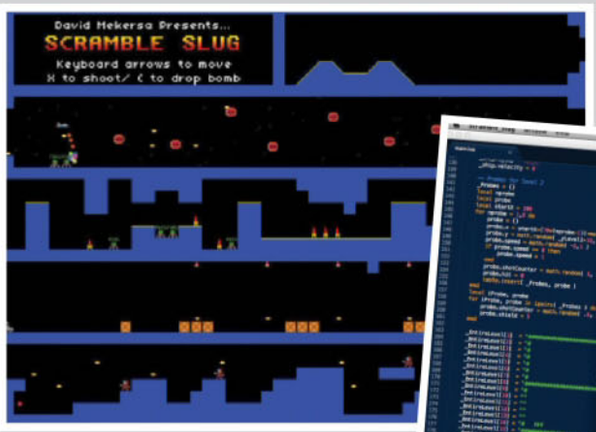
Was it difficult scaling everything down until it fit onto a single screen?
Not so much regarding the gameplay, as *Scramble* is quite a simple game with few phases. Visually, the challenge was different. My choice was to damage the player eyes by using very small sprites. *Scramble Slug* is made of 16x16 tiles on an 800x600 screen. It allows more than 1,800 tiles on a single screen!

Is there anything you'd have done differently if the Ludum Dare deadline wasn't there?
Yes. First of all, I would improve the graphics and add better feedback for the player; for example, it's not clear when the character changes from the ship to the jeep. Then, I would have allowed the player to return back to the ship and leave the planet. However, the result is quite satisfying. I worked ten hours on the whole project and got some time with my kids over the weekend. I still have plans to revamp the game so that it will cover all the *Scramble* phases, removing the confusing *Metal Slug* part. It will be a kind of *Scramble,* but in a box.

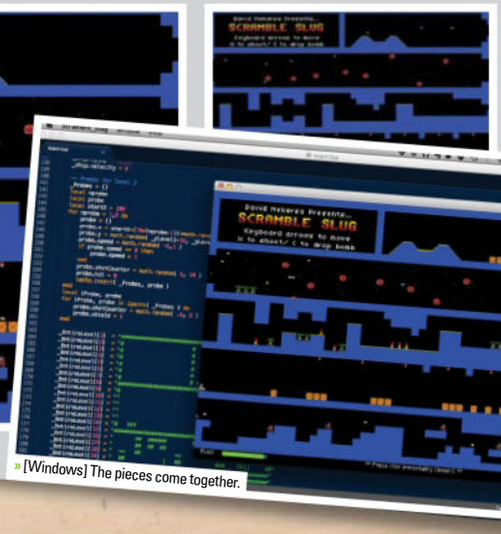
Have you received any feedback from players?
I got great feedback from Ludum Dare members and from my friends (some being professional game makers). It's very rewarding to work on a simple idea and get encouragement the day after. Game jam contests like the Ludum Dare are the place to be for any game designer or coder like me (and I'm both actually). Some people asked me to develop the idea, and I'm very tempted to…

» [Windows] Grenades aplenty in Scramble Slug.

Do you have any other exciting projects on the go that our readers would be interested in?
I'm a 'Neo Retro' gaming fan, and evangelist (I run the Retro Game Jam every year in France and just launched the French website neoretrogames.fr). I'm among those thinking that 3D and complex technologies are more regression than progression for players. My next professional game will be a 2D Neo Retro game combining *Elite*-inspired space travel with *Gauntlet*-inspired dungeon crawling. The codename is *Space Dungeons*.



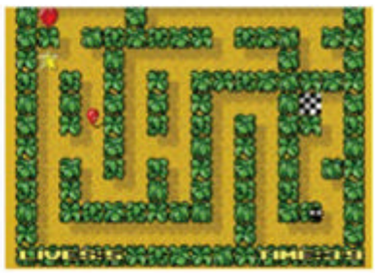
» [Windows] Missing fuel is a bad idea.



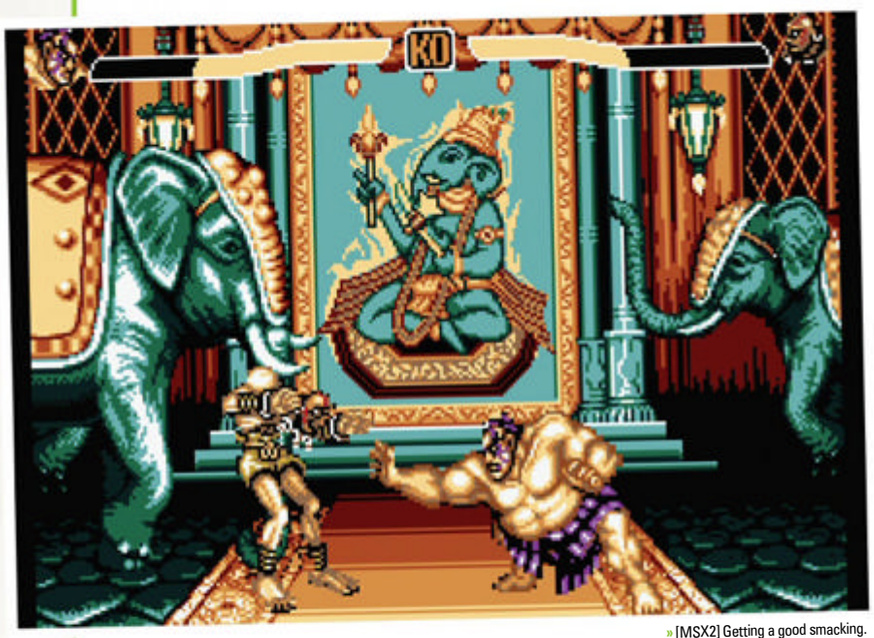
» [Windows] The pieces come together.

#MSXDEV COMPETITION 2014

» [MSX2] Chun Li beats herself up.



» [MSX2] Full of hot air…



» [MSX2] Getting a good smacking.

» **FORMAT:** MSX2 » **DEVELOPER:** VARIOUS
» **DOWNLOAD:** KIKSTART.EU/HASH-MSXDEV-2014 » **PRICE:** FREE

The MSX community must be a little confused since there are two competitions using the name MSXDev out there. One is the long-running event that we've covered releases from over previous years which focuses on the original hardware but the other, named #MSXDev after the IRC channel for MSX developers that has been around since 2002, is only a couple of years old and opens the field to later machines and expansion hardware. For the 2014 iteration of this competition there were two entries released and both require an MSX2 to run.

The first game announced was Baka-Yo! Softcorp's *Pointless Fighting*, a one or two player fighting game which shamelessly borrows both its overall design (and the majority of the in-game assets) from a certain Capcom series. Things have been pared down so there are only six characters, each fight takes place on a single screen and the single player arcade mode is easy enough that even button-mashing warriors stand a very good chance of winning, however, the game is pretty sound and what's there is fun to play even if a seasoned *Street Fighter 2* veteran will walk through it.

Mr. Balloon from Mapax is the second release, a single screen maze game where a cute red balloon drifts around the play area towards the exit while collecting hearts for extra lives, clocks for more time or stars which offer temporary invincibility and avoiding the walls which will pop it or the angry looking hedgehog. Collision detection is pretty strict and the controls are appropriately 'floaty' so getting through each stage is quite tricky, but after each comes a bonus stage that must be completed to continue and the level of precision required to beat even the first one is ridiculously high.

Of the two we found ourselves enjoying *Pointless Fighting* more because, although it does have rough edges and what appears to be some placeholder graphics (well, we hope at least), the gameplay is reasonable enough, and we appreciated getting a single player mode to play around with.

81%

Make this

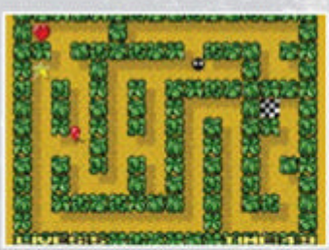
NEW

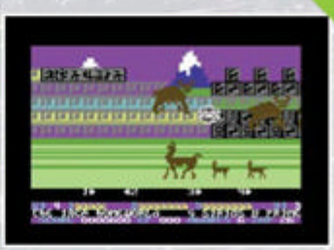
Every month our very own Jason Kelk will be teaching you handy new programming techniques. This month: playing with controls

1 We've touched on controls when talking about jumping, but getting the controls right is important. Something like *Scramble* on the C64 is simple 'push the joystick to go' stuff but, if the game design suits it, there's always room for experimentation.

2 Fighting games live or die by their control systems and not using the controller optimally can kill a game. Something like *International Karate* for the Atari 8-bit works well because a lot of thought and testing went into that side of the design.

3 *Mr. Balloon* on the MSX2 adds caveats to its controls; the player's balloon is constantly in motion and, since it will decelerate before changes in direction are made, there's a delay to allow for before the player's input is fully acknowledged.





4 It's possible to push things too far when experimenting with control schemes; *Mama Llama* on the C64 is a fight against the controls more than it is the enemies. An unusual control scheme can be made to work, but getting the balance right is tricky.

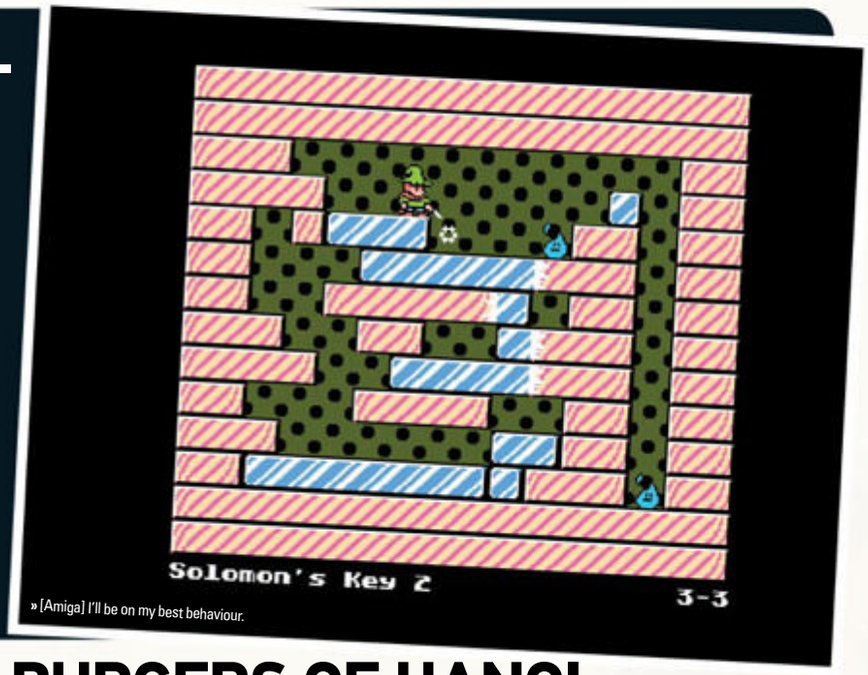
SOLOMON'S KEY 2 – FIRE 'N' ICE

» **FORMAT:** COMMODORE AMIGA » **DEVELOPER:** OOOKAMI GAMES
» **DOWNLOAD:** KIKSTART.EU/SOLOMONS-2-AMIGA » **PRICE:** FREE

Dana the wizard has been tasked by the Queen Of The Winter Fairies with ridding the usually quiet Coolmint Island of evil flame monsters that have been sent by the dastardly wizard Druidle. Dana's wand can create or remove blocks of ice in free spaces to the left or right of whatever he's currently standing on which, if positioned correctly, can be pushed at or dropped onto the flames to dispose of them.

This is developer Hukka's first large assembly language project or the Amiga, but the results are impressive and it sports graphics and level data which were converted from Tecmo's original NES game, although some details have been changed so it isn't a straight port. Progress can be saved to disk, which is useful since there are lots of puzzles to work through and there's even a level editor available from the main menu to create new challenges.

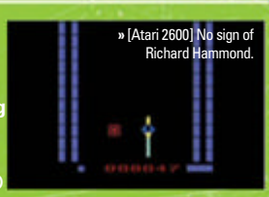
89%



» [Amiga] I'll be on my best behaviour.

WIPEOUT 2600

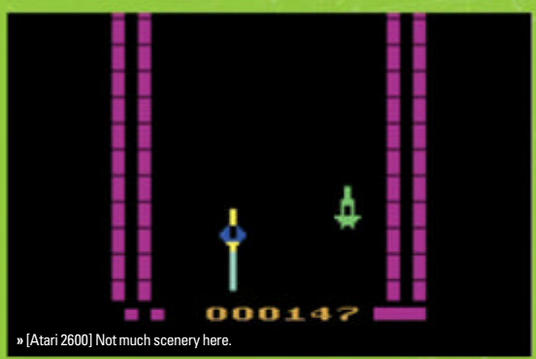
» **FORMAT:** ATARI 2600 » **DEVELOPER:** RETRO LORD
» **DOWNLOAD:** KIKSTART.EU/WIPEOUT-2600 » **PRICE:** FREEZ


» [Atari 2600] No sign of Richard Hammond.

This is a 'demake' based on the series of games that began on the Playstation, boiled down into something that the Atari 2600 is able to run. That obviously meant losing the 3D graphics and CD audio so the action now takes place in a 2D environment, which is viewed from above and scrolls vertically. The racing elements have also been seriously streamlined so players just keep going until they run out of time.

Okay, so really it's a shoot-'em-up with a couple of vague, but friendly, nods to the *WipEeout* franchise such as the boost pads, but we're sure that nobody was really expecting this to be anything else. We found *Wipeout 2600* to be an entertaining and fast paced action game, although keeping the anti gravity craft in the race is very challenging and the game can sometimes be pretty stingy with those crucial time bonuses.

70%



» [Atari 2600] Not much scenery here.

BURGERS OF HANOI

» **FORMAT:** GAME GEAR » **DEVELOPER:** SEBASTIAN MIHAI » **DOWNLOAD:** KIKSTART.EU/BURGERS-SMS » **PRICE:** FREE

Here, we have *a* fast food themed version of the mathematical puzzle *Tower Of Hanoi* where a group of five differently sized discs – or in this case parts of a hamburger – must be moved one at a time across the screen. There are three places where burger components can be stacked and each piece can't be laid on top of anything that is meant to be above it, with the game stopping players from making illegal moves like putting the lower bun on top of any other of the burger's ingredients.

Tower Of Hanoi is quite easy to complete once the logic behind it is learnt and this version doesn't have much in the way of presentation or frills, but the burger flavouring is an interesting addition even if it does sometimes make remembering which piece goes where after they're spread out over screen a bit trickier than it otherwise would be.

60%

» [Game Gear] The aroma's so inviting.

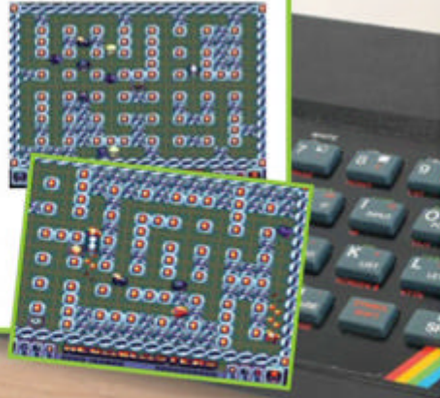
MEGABLASTERS: ESCAPE FROM CASTLE IN THE CLOUDS

» **FORMAT:** AMSTRAD CPC » **DEV:** PROJECT ARGON » **DOWNLOAD:** KIKSTART.EU/MEGABLASTERS-CPC » **PRICE:** FREE

The gameplay of *Megablasters: Escape From Castle In The Clouds* probably doesn't need much in the way of introduction since it's a *Bomberman*-style action game. One or two players drop ticking time bombs to both destroy the enemies and dig power-ups out of the destructible blocks, but care must also be taken to avoid getting caught in an explosion. Some of the enemies are devious so just planting bombs in front of them won't work.

This release was put together to mark the twentieth anniversary of Odiesoft's *Megablasters* being published. The difficulty is higher than the original and there's only the one world to play through, but it's an enjoyable, challenging and well presented tribute.

87%


» [Amstrad CPC] More explodey action.

MAILBAG

HAVE YOUR SAY... SEND US A LETTER OR MAKE YOURSELF HEARD ON THE ONLINE FORUM – **WWW.RETROGAMER.NET**

WIN!

Every month, one lucky writer-in will receive a copy of our latest eMag, **Retro Gamer Load 3**, a bargain if ever there was one

» [Arcade] With The Unconverted being a long-runner, you might have missed your favourites – *R-Type Leo* featured in issue 81!

THE UNINITIATED

Dear **Retro Gamer**,
In issue 138's The Unconverted, your selection of relative obscurities *Demon Front*, *Fast Lane* and *Surf Planet* never seeing the light of day at home are practically irrelevant as *Golden Axe: The Revenge Of Death Adder*, *R-Type Leo*, *CarnEvil* and Capcom's original *Alien Vs. Predator* all should have definitely featured. Racing games? Let's not go there…
Steven

Hi Steven, welcome to Retro Gamer. The reason that these games didn't feature in The Unconverted in issue 138 is that it's actually a long-running feature that first started way back in issue 73, which hit the shelves at the beginning of 2010. It's easy to see how you might have missed that though, as it hasn't featured quite so regularly in recent issues of the magazine. We've covered a great deal of arcade-only favourites since we started the feature, including some of the games mentioned in your letter. *CarnEvil* hasn't yet featured though, and given its popularity in arcades of the late Nineties you can definitely expect to see it in the future.

DISCUSSED THIS MONTH

Xbox

Darran's latest collection drive is once again the talk of the office, as he's revisiting Microsoft's original attempt to crack the console market. On his best day he had 21 games arrive at once, including big hitters like *Crimson Skies*, *Project Gotham Racing* and *Dead Or Alive 3* – not bad!

BINDING FORCE

Hi **RG** team,
Many thanks for the great magazine, I enjoy it very much every month. Just a note on the binders mentioned by Matt Dickerson in the letters section of issue 138 – it would be great if you brought them back, and I could keep my collection all nice! I reckon there will be great demand.
Jack Sturgess

Hello **Retro Gamer**,
I am also a big fan of your magazine and just read the latest issue. The feature on point-and-click adventures was made for me and I really enjoyed it a lot!

In the Mailbag section you asked about the **Retro Gamer** binders. I would also REALLY be interested in getting some more. Currently I have only one empty in store and the current one is almost full… So there is not much time left until I need a new one.
Thanks for the great magazine!
Stefan Hubertus

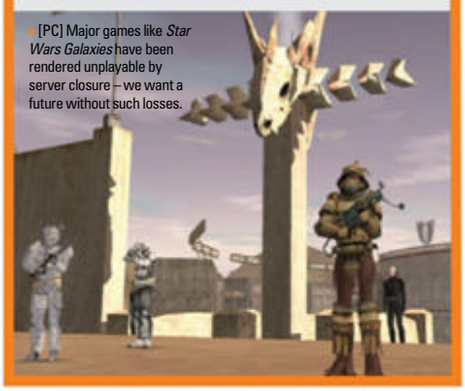
STAR LETTER

THE FUTURE OF GAMING HISTORY

Hi **Retro Gamer,**
I heard something quite profound while listening to Planet Rock this week. Now, bear with me here, the gist was that if you live your life through a nostalgic lens, if you constantly harken back to yonder year, then you risk living with no dreams for the future. So here's a question for you: what are your dreams for retro gaming in the future? How about a single online library of every game ever published, downloadable to a format of your choice? Or modern reissues of old machines and consoles, upgraded and running at a higher spec? Me? Well, I'll start with *Shenmue 3* and take it from there…
Tim Fitches

One of the things we'd really like to see is developers releasing server software for their games once official support ends, so that dedicated fans can maintain them. This is hugely important – there's no way to play the million-selling MMORPG *Star Wars Galaxies*, and other games will surely be lost to time in the same way if this situation isn't resolved.

There are a few more things on our retro wish list, too. It's great that companies are import-only titles on digital services, but many Japanese games are released untranslated. We'd also quite like it if someone could make old lightguns work with modern TVs, but we do fear that one might be a pipe dream. Thanks for a thought-provoking question, Tim!



» [PC] Major games like *Star Wars Galaxies* have been rendered unplayable by server closure – we want a future without such losses.

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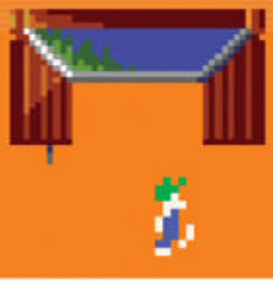

Hi **RG**,
Please, please, please bring back the **Retro Gamer** binder. I have been buying your magazine for the past four years. I have kept a lot of them and need to put them in a binder. I cannot understand why they stopped selling them. Please have a word and bring them back again… please.
Graham Turner

Thanks for all of your feedback on binders – it's clear that some of you greatly enjoy having them, so we'll pass that feedback on to those who make the merchandise. Oh, hang on, it looks like we have one more…

RETURN JOURNEY

Hello**,**
I would like to add my name to the list of people who are looking for **Retro Gamer** binders. I used my last binder a few months ago and I don't have one in which to store the most recent issues.

I was also pleased to see an interview with Chris Sawyer in the latest issue. *Transport Tycoon Deluxe* was one of my favourite games for the PC so was interesting to read a little about its development. Maybe it (along with *Transport Tycoon*) could feature as part of an 'Ultimate Guide' or 'The History Of…' article in a future

» [PC] *Transport Tycoon* remains a favourite with fans over 20 years on – we'd like to feature it in the future.

issue? I would also be interested to know what Chris' opinion is of the popular OpenTTD remake of *Transport Tycoon Deluxe* – something that wasn't mentioned in your interview.
Nicholas Campbell

Thanks for the feedback on the binders – as you can see above, you're not alone! We'd certainly like to speak to Chris again in the future and put together a feature on *Transport Tycoon*, but it's not something we could put a specific date on right now.

SPELLBOUND

Dear **Retro Gamer,**
Please review the excellent Master System game *SpellCaster*, I can assure you it is bloody brilliant. It was highly innovative for its day. For example you could talk yourself out of a boss challenge and the last level was a scrolling shoot-'em-up, while the rest is mostly adventuring RPG-lite!
Thank you for acknowledging *Cloud Master*, I love the way your avatar in the game blinks at you, and boy is it brutally hard. I could only reach the second level as the collision detection was so unfair.

Thanks for a bloody good read.
Ryan Hayward

Hi Ryan, we're glad to hear you're enjoying the magazine. *SpellCaster* certainly isn't the biggest name out there, but it's got some interesting history. The original Japanese release was based on the popular manga series *Kujaku Oh*, a licence which spawned other games such as *Mystic Defender* on the Mega Drive, though none of them play the same as *SpellCaster*.

We're not sure when or how we'll feature it, but the unusual genre-splicing design means it deserves some attention in the future.

» [Master System] Few Eighties games featured the type of multi-genre gameplay that characterised *SpellCaster*.

From the forum

» www.retrogamer.net/forum

Every month, Retro Gamer asks a question on the forum and prints the best replies. This month we wanted to know…

What do you love (or hate) about Lemmings?

Antiriad2097
It was one of my first experiences of gender friendly gaming, as Mrs Ant v1.0 took to it and we'd often have two player games, a feature that gets little note when the game is discussed usually. That you could subvert the other player's lemmings into your own home made for heated exchanges.

fredghostmaster
I only played it on the Mega Drive, but who didn't get a perverse pleasure from nuking those little critters!

The Laird
While I loved it on the ST, I think it's actually the Lynx version I have played the most. The conversion to Atari's handheld is just superb, I was actually amazed at just how well it works on the small screen, it's a perfect handheld game and, IMO, the best version of the game too.

RodimusPrime
Simple, me and a friend played for hours on the Amiga just to hear what tune played on the next level. It had some amazing catchy tunes.

antsbull
I loved how they put out the Christmas *Lemmings* cover disks levels each year.

slacey1070
I liked the 'pop' noise they made as you nuked them – wonderful sound. It was a real crossover game that attracted non-gamers to the world of videogames.

Thedude18
Still impressed that a conversion managed to appear on the humble C64 at the time. An impressive conversion too from what I can remember!

ncf1
I remember playing it just because the magazines told me to at the time – it looked nothing like something I would want to play, but then you'd play it and see what they were talking about.

Gibberish Driftwood
I like how they included levels based on other Psygnosis games, like *Shadow Of The Beast* and *Menace*.

retro GAMER

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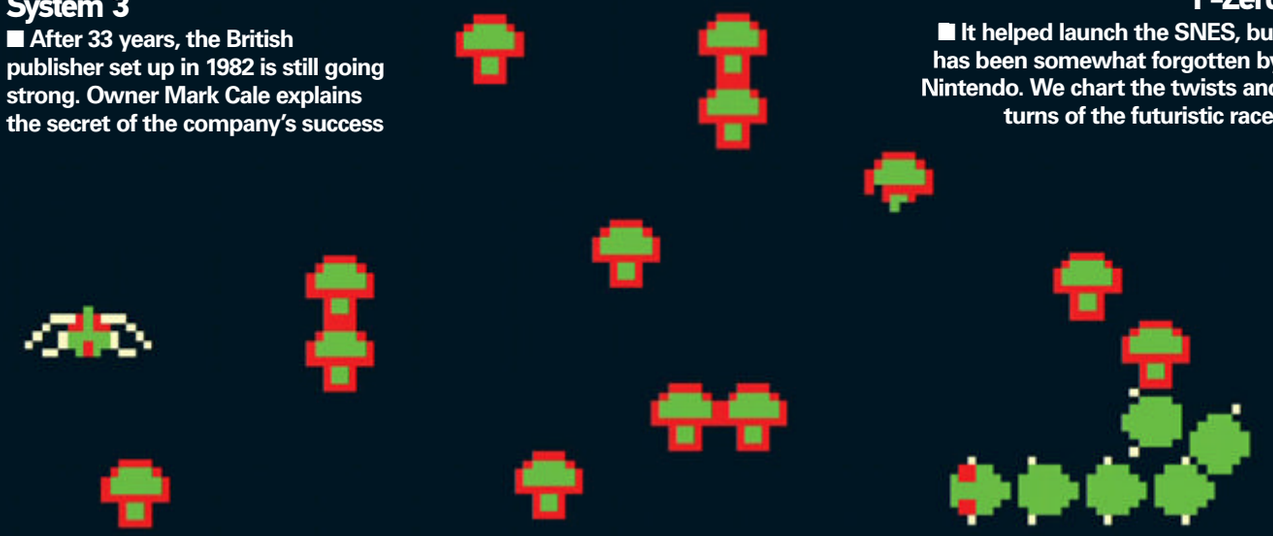
■ It helped launch the SNES, but has been somewhat forgotten by Nintendo. We chart the twists and turns of the futuristic racer



CENTIPEDE

Dona Bailey explains how she teamed up with Ed Logg to create one of gaming's most iconic shoot-'em-ups

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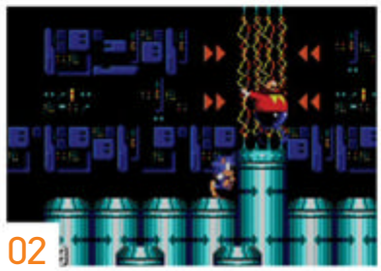
ENDGAME

SONIC THE HEDGEHOG

» While Sonic Team's landmark platformer was wowing gamers everywhere back in 1991, Sega made sure not to forget its 8-bit fans. The company hired a new development team called Ancient, managed by Yuzo Koshiro, to ensure that a Master System version was delivered. The result was a different, but still excellent, platformer. Let's skip to Sonic's climactic showdown with Robotnik in the Sky Base Zone...

01

» Sonic's managed to evade Robotnik's electric barrier and laser, and now he's broken through the villain's glass shield! The evil doctor does a runner, but that's no problem for Sonic – he can run faster than the speed of sound, after all.



02

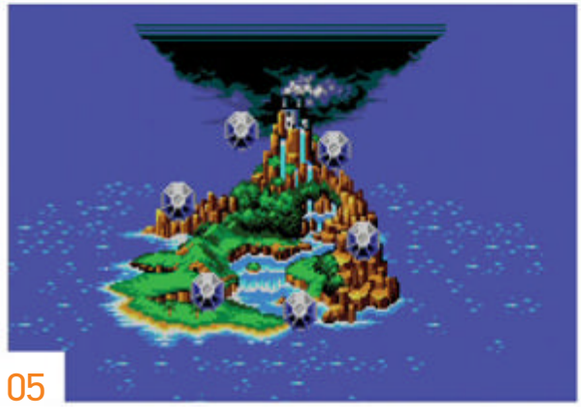
» But apparently, it *is* a problem, because Robotnik has managed to get to the teleporter first. Either the rotund wrongdoer has learned to run at an incredible pace, or the hedgehog isn't quite as fast as he likes to claim.

03

» Luckily for animals everywhere, Sonic teleporting in second is actually a good thing, as he's able to drop on Robotnik's head and deliver a spin attack. That should put gaming's dumbest genius out of commission until the inevitable sequel.

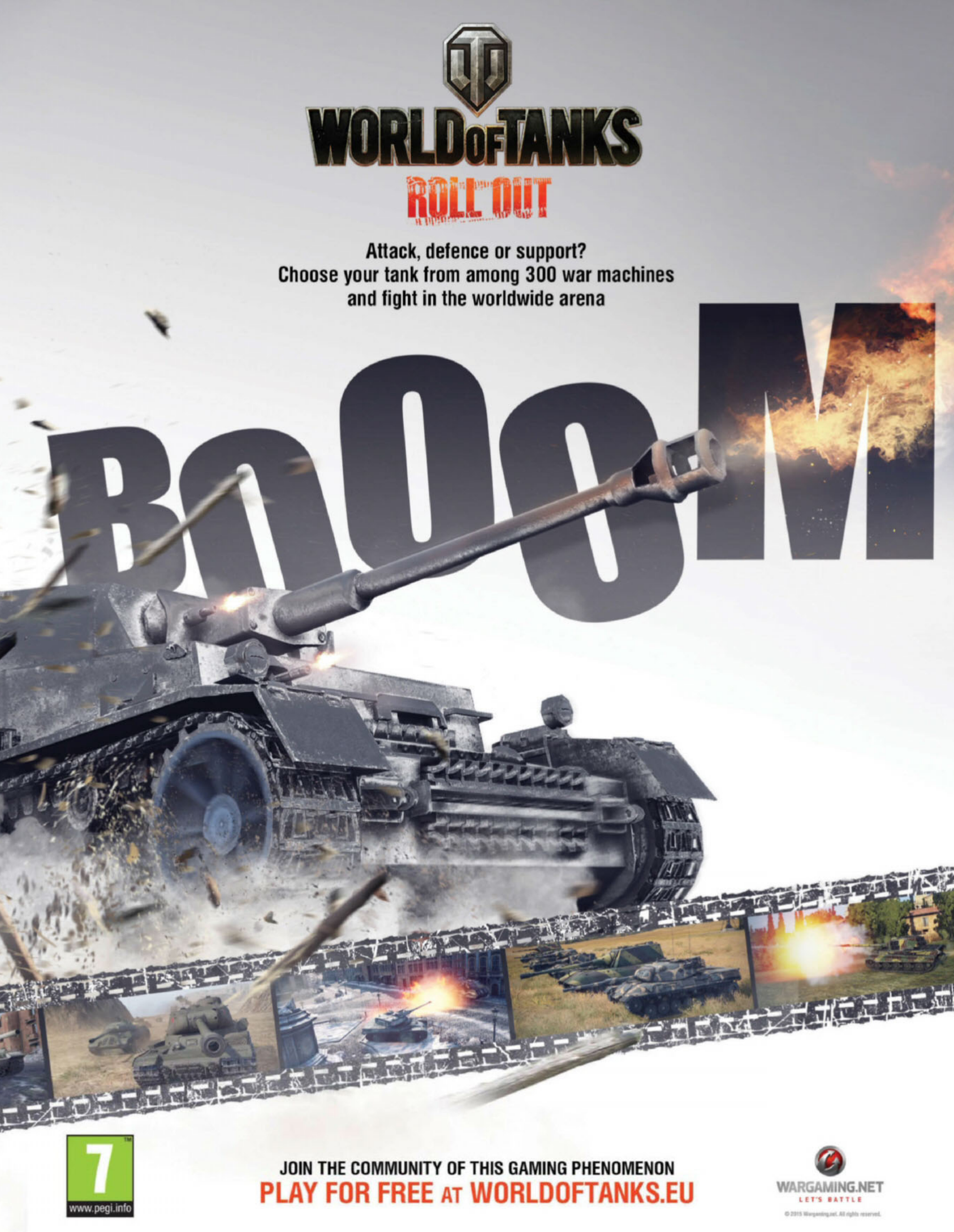
04

» Satisfied that he's done his job, Sonic decides to release the Chaos Emeralds he's collected. At this point, we're not sure quite what they'll do – the name suggests that they could inflict all kinds of mayhem upon the inhabitants of the Green Hill Zone. This might be a bad idea, Sonic.



05

» Nope, it turns out they spin off into the air and promptly clean up the island! The local bin collectors and eco-warriors are none too happy that Sonic has destroyed their source of income and source of moral superiority respectively, so it's time for Sonic to use that speed again and get the hell out of there...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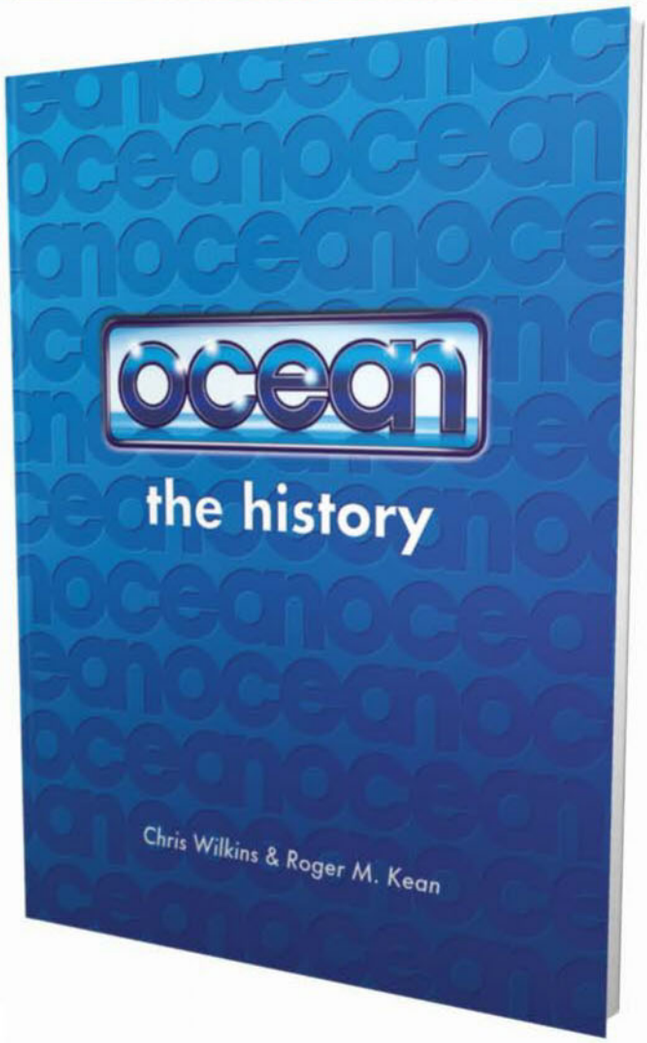
-David Ward



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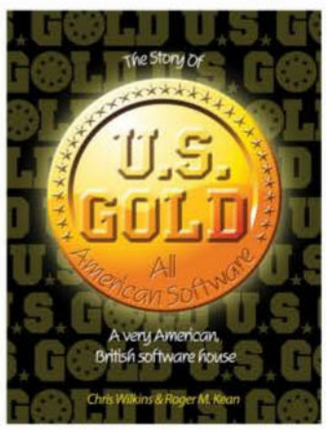

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